

# FLIGHT

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AND AIRSHIPS

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## DIARY OF CURRENT AND FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list:—

- 1932
- June 10. Night Flying Demonstration, Heston Airport.
  - June 11. Close of Royal Tournament, Olympia.
  - June 12. Finish of Tour de France.
  - June 12. Herts and Essex Ae.C. Meeting at Broxbourne.
  - June 12. Ae.C. of Germany Air Pageant at Tempelhof.
  - June 13-14. Cricket: R.A.F. v. Incogniti at Uxbridge.
  - June 15. Henlow R.A.F. Station Annual Sports.
  - June 17-18. Night Flying Display at Ratcliffe Aerodrome.
  - June 17-19. Isle of Man Race.
  - June 18. Nottingham F.C. Air Pageant, Tollerton Aerodrome.
  - June 18. Hull Air Display.
  - June 18. Reading Ae.C. At Home, Woodley Aerodrome.
  - June 19. Royal Aeronautical Society Garden Party, Hanworth.
  - June 21. Aero Golfing Society: "Flight" Challenge Cup, Bramshott G.C.
  - June 21-28. Blackpool Air Pageant, Stanley Park.
  - June 25. R.A.F. Display, Hendon.
  - June 25-26. International Tourist Rally, Boulogne.
  - June 26. "Tatler" Concours d'Elegance, Brooklands.
  - June 28. Visit to National Physical Laboratory, Teddington.
  - June 29-30. Cricket: R.A.F. v. Army at the Oval.
  - July 2. Arrival of Graf Zeppelin at Hanworth, 6 p.m. approx.
  - July 2. Opening of Portsmouth Municipal Aerodrome.
  - July 2-3. International Tourist Rally, Rheims.
  - July 3. Meeting at Cote Hill Aerodrome, Rugby.
  - July 5-7. R.A.F. Athletic Championships at Uxbridge.
  - July 8-9. King's Cup Air Race, start and finish Brooklands.
  - July 9. R.A.F. Athletic Championships at Uxbridge.
  - July 9-10. International Tourist Rally and Meeting, Clermont-Ferrand.
  - July 14. International Rally, Saint-Brieuc.
  - July 16. Shanklin Air Pageant.
  - July 16-17. International Meeting, Dieppe.
  - July 22-31. International Meeting, Zurich.
  - July 30-31. Skegness Air Pageant.
  - Aug. 1. Cowes Air Pageant.
  - Aug. 11-28. International Touring Competition, Berlin.
  - Aug. 15-16. Cricket: R.N. v. R.A.F. at Lords.
  - Aug. 19-21. 4th Annual Canadian Air Pageant, St. Hubert, Quebec.
  - Aug. 20. Ryde Air Pageant.
  - Sept. 3. Leicester Chamber of Commerce Day, at Desford.
  - Sept. 4. Divine Service at Ratcliffe Aerodrome, 2.30 p.m.
  - Sept. 5. F.A.I. Conference at The Hague.
  - Sept. 8. International Meeting, Vincenza, Italy.
  - Sept. 25. Gordon Bennett Balloon Race, Basle.
  - Oct. 1. Bristol and Wessex Ae.C. Garden Party.
  - Oct. 18. Aero Golfing Society: Cillon Challenge Cup, West Hill G.C.
  - Nov. 18-Dec. 4. Paris Aero Show.

## THE ROYAL AIR FORCE DISPLAY

*Lest you forget, June 25 is the day fixed for the Thirteenth Royal Air Force Display at Hendon—undoubtedly the Premier Aeronautical Event of the Year. The coming Display will include many new and attractive items which should not be missed!*

## EDITORIAL COMMENT



### The Position in Australia

IR transport in Australia is in an interesting and critical state. For a number of years Australia occupied the proud position of being the foremost flying country in the Empire—in fact, from some points of view, it could have been called the foremost flying country in the world. We cannot deny that this last title must now go to the United States; while in our Empire, Canada has put up a stout challenge to Australia's supremacy. Now that bad times have descended upon the world, another threat to Australian air transport has arisen.

The air reputation of Australia has depended chiefly on the operations of two subsidised companies:—West Australia Airways, Ltd., which operates weekly services from Wyndham, in the North, to Perth, and from Perth to Adelaide, and the Queensland firm, commonly known as Q.A.N.T.A.S., which runs weekly services between Brisbane and Camooweal. The Larkin firm carries on a service from Camooweal to Daly Waters, which is connected by rail with Darwin. It only remained to connect Adelaide with Brisbane, and to link up Wyndham, Darwin and Daly Waters in order to complete the encircling of all Australia by aeroplane.

Several attempts have been made to run air services across the south-eastern part of Australia, but such services have entered into competition with efficient railway services. This was such a heavy handicap to the aircraft that all such air lines have now been discontinued. The great merit of the West

Australia and Qantas lines has been that they have flown over grazing tracts where there is no other means of even reasonably rapid transport. Certainly there is a railway between Perth and Adelaide, but it is hampered by one or two changes of gauge. It crosses a very unattractive stretch of desert country, which makes the journey extremely tedious to passengers. The "Viastra" aeroplanes of West Australia Airways easily surpass the trains in comfort, and they save from three to four days on the journey between Perth and Melbourne. On other routes the airways have brought sheep and cattle farmers in the "Out-back" into touch with civilisation. Their services on the medical side have been beyond all praise. Their safety and regularity have been the envy of, and a reproach to, some other lines in other parts of the world. The subsidies paid to them have been progressively reduced as their traffic has grown, and yet their shareholders have received dividends.

In times of financial stress it was only natural that a Government at its wits' end for money should turn hungry eyes on the airway subsidies. The Federal Auditor-General, Mr. Cerutti, has made a report on the airway subsidies, in the course of which he wrote that "although there was some convenience to those who used the service, the expenditure, particularly during the existing Treasury difficulty, was economically unsound, because it was unnecessary and largely provided luxury and duplicate services. There is no doubt that . . . the great mass of the population, who never use those services and who cannot afford them, are subjected to a severe tax quite out of proportion to the benefits received. The subsidies paid last year, after deducting the air-mail fees, total £83,671. The weight of mail matter carried was 30,957 lb., the average cost per lb. being £2 14s." Mr. Cerutti then went on to talk about the loss to the Commonwealth and State Governments through the competition of the airways with railways, telegraphs and telephones.

Though we admit that the cost paid for a pound of mail matter does seem high, still the mail was not the only cargo, and the figure might be modified if that fact were taken into account. It also seems to us that the lines of criticism adopted by the Auditor-General are quite unsound. In the first place, the airways ought not to be blamed because they serve tracts where the majority of the population can make no use of them. They certainly are not for the benefit of the overgrown populations of Sydney and Melbourne, but for the advantage of the farmers in the "Out-back." Does Mr. Cerutti think that the Federal Government owes no duty to these people? Surely the whole future of Australia depends upon opening up the great grazing areas by providing means of communication. It would be very expensive to drive a number of railways up from the South to the North, and the loss on them in their early years would certainly be heavier than it has been on the airways. In fact, the airways have been subsidised, not so much because they provide the fastest form of transit, but because they are the cheapest form of communications to institute.

As regards competition with the Government-owned railways, we do not profess to be authorities on the merits of socialism, but it seems that things have come to a queer pass when a Government feels impelled to suppress a modern and improved means of communication, because of its own vested interests

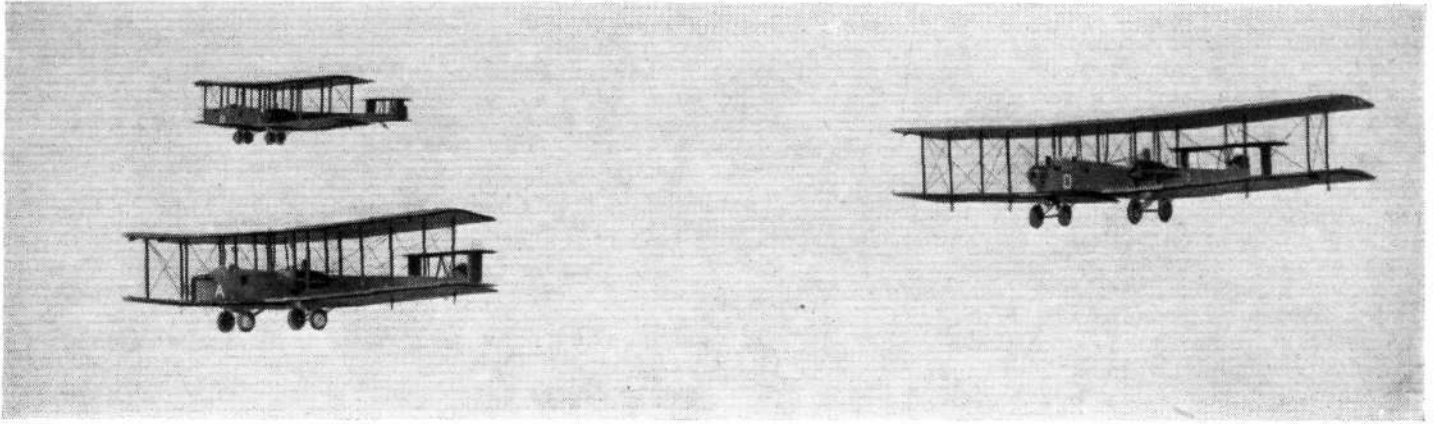
in an older and apparently less popular form of transport. This competition only occurs in one case, namely, the route between Perth and Adelaide. On the west coast the railway only runs north as far as Geraldton, and beyond that there is no competition. In Queensland, there is direct competition from Brisbane as far as Charleville. Thereafter, the Qantas line connects the railheads of lines which run inland from the coast main line. To get from Charleville to Cloncurry by air is to follow a straight line; to go by rail means travelling down to the coast at Brisbane, then up the coast to Townsville, and then inland, following more than three sides of a square. To uphold the interests of such railways against the airway would be an absurdity.

The airway from Perth to Adelaide is valuable, apart from the greater comfort which it offers to passengers, because it saves a week in getting a reply to a letter from London. This saving would not be worth while if there were an airway from London right through to some port in the North, either Darwin or Wyndham. Ultimately that through line must be established, and then the Perth-Adelaide airway will no longer be of prime importance. Imperial Airways are only too anxious to open up the line to the North of Australia, and the Australian companies are considering how to help in the matter. Major Brearley, of West Australia Airways, Mr. Fysh, of Qantas, and Sir Charles Kingsford-Smith, of Australian National Airways, are considering a combined scheme for distributing the mails southwards from Wyndham, while Capt. Larkin is said to be negotiating with the Dutch air lines for a service from Europe to Darwin and distribution southwards from that port. The three first-mentioned parties, who are in touch with Imperial Airways, are said to have put up the proposal that the subsidies now paid to the West Australian and Queensland lines should be used for opening up the new service from Wyndham to the South. Exact details are lacking at present, and we are not sure if it is proposed to abandon the line from Perth to Wyndham and to fly straight southward to Adelaide and Melbourne. If that happens, the inhabitants of the western coast will certainly regard the change as a calamity. We understand that the three firms mentioned are prepared to combine in a new merger company which would operate as far as Singapore, if they could there meet a mailplane of Imperial Airways. The whole future now seems to depend on the chances of arranging for Imperial Airways to fly across India.

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The air figures well in the list of honours conferred on the occasion of His Majesty's birthday. The Prince of Wales heads the list, but in his case the notification means a recognition of the fine work done by the squadrons of the Auxiliary Air Force, whose honorary Air Commodore-in-Chief His Royal Highness now becomes. The Duke of York receives promotion to Air Vice-Marshal. Next we notice with pleasure that four gentlemen receive the golden spurs of knighthood. Sir John Siddeley and Sir Charles Kingsford-Smith become knights bachelor, Air Vice-Marshal Sir Tom Webb-Bowen becomes a Knight Commander of the Bath, and Wing Com. Sir Louis Greig becomes a Knight of the British Empire.





A Flight of No. 7 (Bomber) Squadron. (FLIGHT Photo.)

## Worthy Down

A Visit to the Night Bombers. Nos. 7 and 58 (Bomber) Squadrons

By MAJOR F. A. de V. ROBERTSON, V.D.

**W**ORTHY DOWN is an aerodrome of the Royal Air Force lying on the Downs above Winchester, not far from the picturesque, and picturesquely named, village of King's Worthy. It is an airy spot, unaffected by the relaxing atmosphere which hangs over the old capital of the kingdom of Wessex. Yet the proximity of Winchester makes Worthy Down a desirable Air Force station. Some aerodromes are absolutely in the wilds, and when the airman or the officer feels fed up with aeroplanes there is not much to distract his mind. Winchester is quite a pleasant place, albeit somewhat enervating as a residence and somewhat overshadowed by the Cathedral Close. Of the Cathedral itself, its Norman tower and its Norman arches, and of that romance of architectural engineering when a diver had to be used to lay bags of cement under the Cathedral foundations in the marsh, this is hardly the place to speak. Nor is this the place for speculations as to whether the round wooden table, which hangs on the wall in the castle hall, is actually the Round Table at which the Ancient British Chief, King Arthur, used to feast with his two dozen knights. The Saxon king, Alfred the Great, is not legendary, and his statue in Winchester is one of the finest statues in England. It should bring home to the squadrons of the Wessex Bombing Area on Worthy Down that they really do belong

to Wessex. Moreover, a cathedral, even one with a squat Norman tower, is always a handy landmark for aircraft coming home to roost.

Worthy Down is the home of No. 7 (Bomber) Squadron and of No. 58 (Bomber) Squadron, both night-bombing squadrons of the Royal Air Force. Each squadron is equipped with the Vickers "Virginia," driven by two Napier Lion engines. It is a good many years now since the "Virginia" first went into service, and while it has been steadily improved, it is no secret that the Air Ministry is on the look-out for a new standard type of night bomber. It will be remembered that at the Hendon Display last year a new Vickers machine, driven by four Rolls Royce Kestrels was on view, which was admitted to have a very good performance. No doubt other types have been considered by the Air Ministry, but the deliberations are secret. The result of them will doubtless be published in due course. In the meantime, it can be said that the "Virginia" has done very good service. It is a reliable aeroplane, somewhat leisurely but eminently useful. It carries a respectable load of bombs, some 2,000 lb., and has a long range. These are two of the most important points in a night bomber. The next standard type will doubtless give much greater speed, which is also a very desirable point. The "Virginia" is well armed, and her



Officers and Pilots of No. 7 B.S. with the Minot Trophy. Names :—Front Row (left to right) : F/O. G. A. C. Foster ; F/O. E. D. Bishop ; F/O. E. J. Finnegan ; F/O. M. A. Platts ; Flt. Lt. R. A. Barlow ; Flt. Lt. W. J. Seward ; Group Capt. J. R. W. Smyth-Pigott, D.S.O. ; Wing Com. A. L. Gregory, M.B.E., M.C. ; Flt. Lt. R. A. A. Cole ; Flt. Lt. J. R. Brown, D.F.C. ; F/O. C. R. Crow ; F/O. P. J. J. Cullinan ; F/O. R. J. R. H. Makgill ; F/O. M. R. D. Trewby. Back Row (left to right) : Sgt. J. R. Watt ; Sgt. C. F. C. Ridout ; Sgt. A. C. Wilson ; Sgt. W. L. Wade ; P/O. F. B. Bristow ; P/O. F. R. Newall ; P/O. E. R. Berry ; P/O. J. A. B. Begg ; F/O. R. L. West ; Sgt. E. F. C. Worthy ; Flt. Sgt. F. N. Paxman ; Sgt. A. Strugnell ; Sgt. C. J. E. Bolland ; Sgt. W. V. Creates.

(FLIGHT Photo.)

guns have a good range of fire. If she can sight her assailant she ought to give a good account of herself.

In the Air Exercises of 1930 it may be remembered that the A.O.C. of the southern belligerent country used his night bombers for long-range raids into the northern territory by day. There was a gap through the imaginary mountain range near Sealand, and as the distance from the southern aerodromes to the northern centres *via* this gap was beyond the range of the southern day bombers, the northern command left the gap unguarded. It was very much surprised when the "Virginias" flew up by day through this gap, absolutely unmolested, and calmly proceeded to bomb some important points. Both No. 7 and No. 58 B.S. were employed on that adventurous raid. It showed that the work of heavy bombers need not necessarily be confined only to night bombing.

The establishment of a night bomber squadron is 10 machines organised in two flights. Each flight is commanded by a squadron leader, and the squadron by a wing commander. The station of Worthy Down is commanded by a group captain. The present Station C.O. is Group Capt. J. R. W. Smyth-Pigott, D.S.O., who took his Aero Club certificate (No. 725) on January 15, 1914, having learnt to fly at the old Bristol School. The great pride of Worthy Down station is that every year one or other of its squadrons wins the Lawrence Minot Trophy presented for the best all-round night bomber squadron of the year. No. 58 Squadron won it a couple of years ago, and No. 7 has won it four or five times. It is given for points gained in competitions at Catfoss shooting camp. Squadrons have to compete with practice bombs and live bombs both by day and night. Marks are also given for machine-gun practice at targets in the air and on the ground, as well as for other elements of efficiency.

No. 7 B.S. rejoices in the possession of automatic pilots on all its machines. This device is a great success. Not only does it rest the pilots and relieve the strain of difficult flying, but it definitely makes flying possible on days when, without the automatic pilot, no cross-country flying would be advisable. One senior pilot of the squadron mentioned an occasion when he was in the north of the country and was due to fly back on a certain day to Worthy Down. The weather was dirty and treacherous, and he said frankly that on another type of machine he would have postponed his start. But with the automatic pilot he felt absolute confidence, and got home with no untoward results. The device makes other things possible, too, such as flying in formation through clouds. No. 58 Squadron recalled how on the daylight raid in 1930, after

passing through the Sealand gap, they met huge banks of clouds. No. 7 B.S. in front of them climbed unhesitatingly in formation into the clouds. The automatic pilots would not be confused by the lack of visibility and would see to it that there were no collisions. No. 58 had to work painfully round, and as they approached their objective they met No. 7 B.S. returning home, having released all their bombs. A device which makes such a difference to operations is a great asset.

No. 58 B.S. is proud of the fact that not only was it a night bomber squadron during the war, but also when it was re-formed in 1922 by Sqd. Ldr. Harris it was then the only night bomber squadron in the Royal Air Force. One of the best known officers in the squadron after its resurrection was the late Sqd. Ldr. Longton, who was as skilful in handling a twin-engined bomber as he was with the fastest racing machines of those days. It was No. 58 which supplied the machine from which our photographer took the photographs which illustrate this article. The five-point electrical communication device on the machine is a great convenience, and the skill of the pilot (who incidentally is one of the well-known athletes of the Royal Air Force) in handling his great machine was impressive. The pictures of the formation flying by both squadrons speak for themselves. By night, of course, squadrons do not fly in formation.

Both squadrons have honourable war records, and below we give short accounts of the history of each.

#### No. 7 (Bomber) Squadron

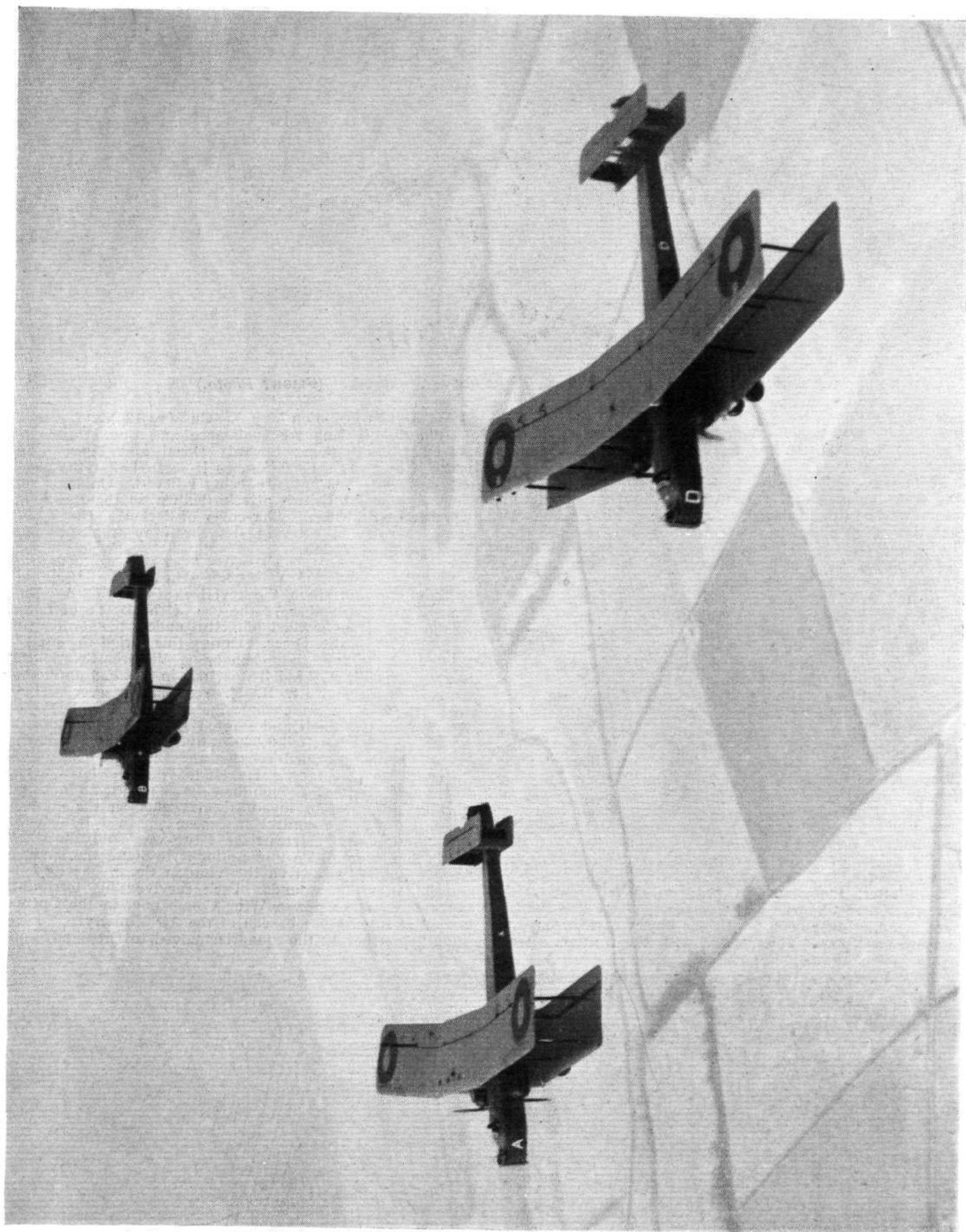
No. 7 Squadron has a long and very honourable war history. Its function during the war was army co-operation, which included artillery observation, photography, contacts patrols, bombing behind the enemy's lines, and occasional attacks with machine guns on enemy troops. Its work was mostly carried out on B.E. machines of various categories up to June, 1917, and after that on R.E. 8's.

The formation of the squadron was commenced in the summer before the war, namely, in May, 1914, at South Farnborough. The process was not complete when war was declared, and not unnaturally all the personnel were transferred to other squadrons which were going overseas. The war had not been in progress for long, however, when it became apparent that four squadrons would not suffice for the needs of Sir John French's Army. As the battle lines became consolidated after the battle of the Aisne, the demand for more squadrons arose, and the formation of No. 7 was taken up again in September, 1914. The officer entrusted with this task was Capt. A. G. Board, who is

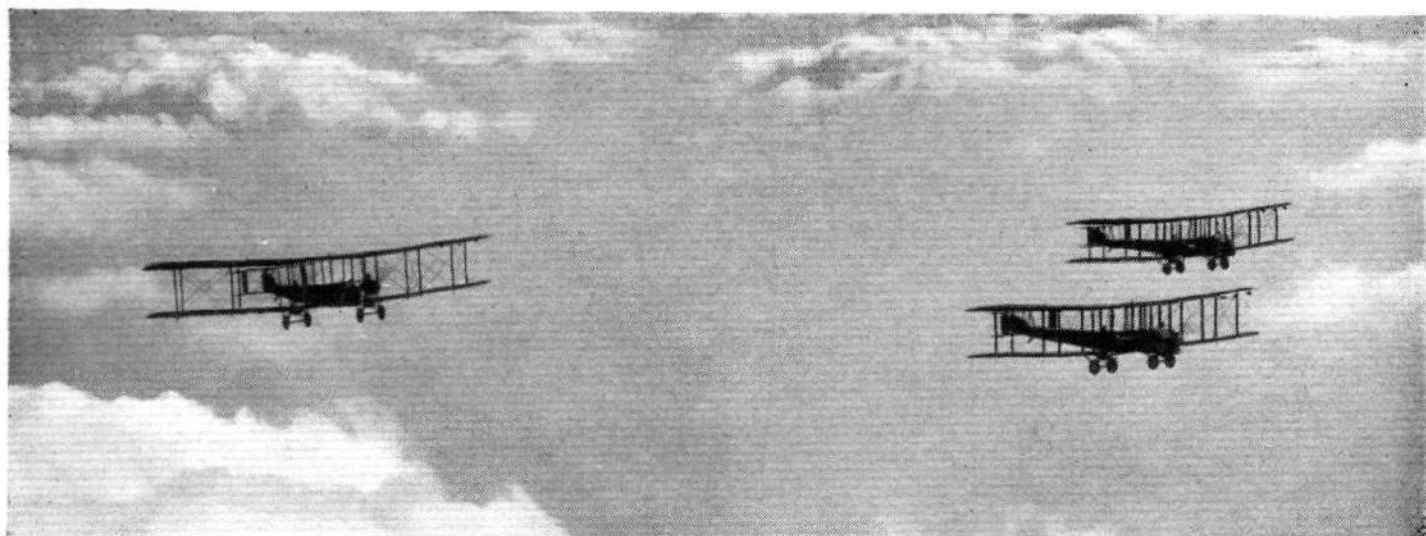


Off on a night raid : Warming up the "Lion" engines. (Flight Photo.)





No. 7 (Bomber)  
Squadron: Three  
"Virginias" in for-  
mation. (FLIGHT  
Photo.)



No. 58 (Bomber) Squadron : A Flight above the clouds. (FLIGHT Photo.)

now an Air Commodore, a C.M.G. and a member of the D.S.O. He was lately selected to take command of the Egyptian Army Air Service, but has resigned that appointment.

There was further delay, however, before the squadron was sent overseas, and this was probably maddening to men who doubtless believed, as most people did believe at that time, that the war would be over in a few months. No. 7 was sent to Netheravon on October 22, and there was employed for a while as a training squadron, getting the nucleus of No. 11 Squadron ready for France. At last, in April, 1915, No. 7 was itself sent to France, just in time to take part in the second Battle of Ypres. Maj. C. G. Hoare was then in command, and the equipment was two flights of R.E. 5's and one of Vickers' Fighters. The latter machines were soon replaced by Voisins. The squadron joined the 3rd Wing under Lt. Col. Brooke Popham, and was stationed at St. Omer, though one flight was sent to Boulogne until May 26.

April 26, 1915, was one of the critical days of the great battle. The defence of the salient had been thoroughly disorganised by the surprise gas attack four days before. However, the Lahore Division had been brought up from the 1st Army by a forced march, and it made a gallant counter attack on the German positions, which held the enemy in his trenches and so cost him the best chance he ever had of taking the town and salient. On that day two R.E. 5's of No. 7 Squadron were sent off to bomb Thielt, Staden, and Roulers.

Soon after, the centre of pressure moved southwards towards Neuve Chapelle and Festubert, where the British were planning an advance with the object of relieving the pressure on Ypres. This started with the fruitless attack

on the Aubers Ridge on May 9. On May 12 No. 7 carried out a valuable long reconnaissance and saw streams of railway traffic moving towards Douai and Lens. This report gave great satisfaction, as it seemed that the pressure on Ypres was actually being relieved. On May 15, when the second British attack (known as the Battle of Festubert) commenced under cover of darkness, No. 7 was again fortunate in observing more railway traffic moving in the same direction.

#### A Victoria Cross

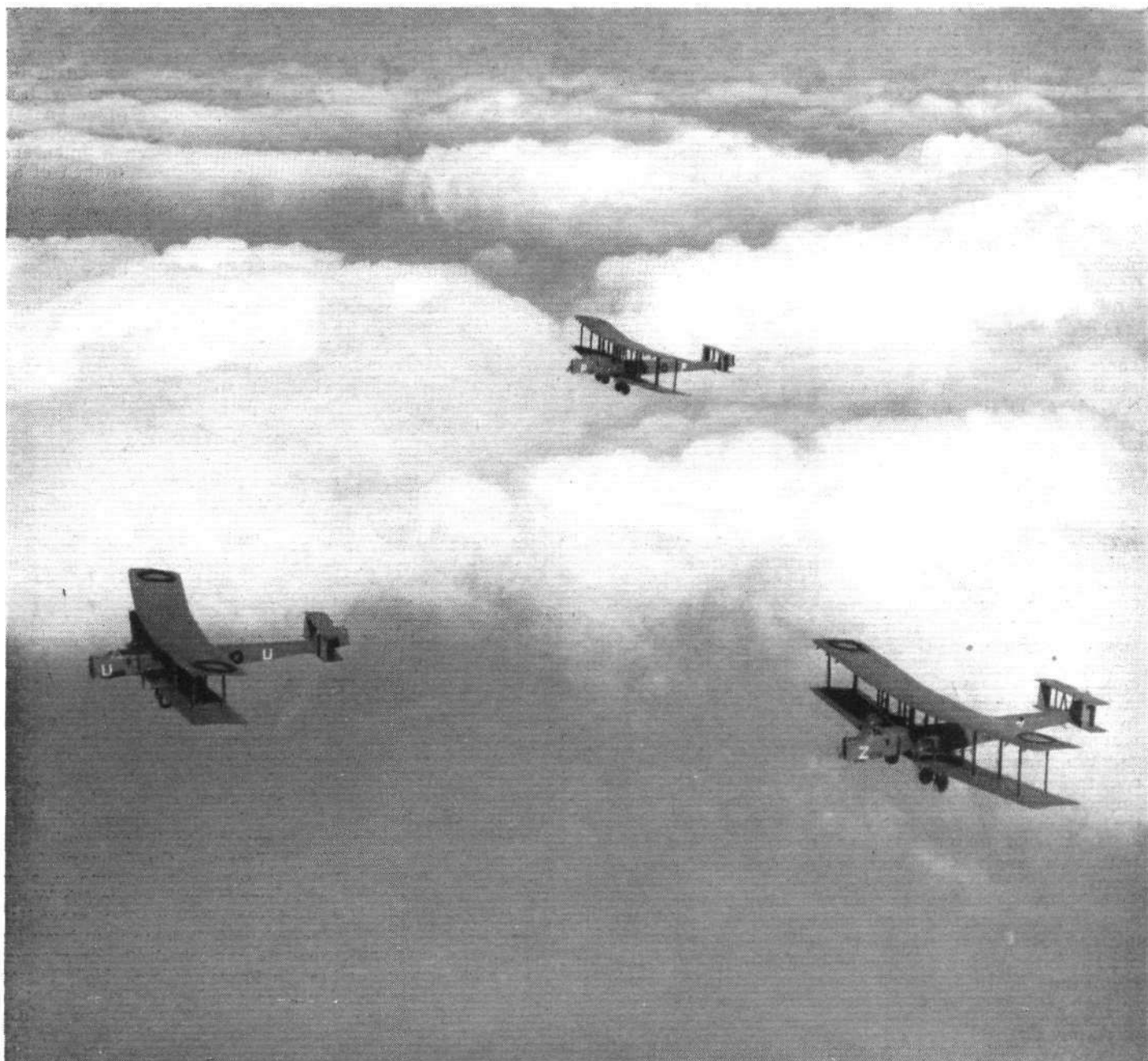
From July 20, when the severity of the fighting had waned, until September 12 the eve of the Battle of Loos, No. 7 Squadron worked directly under the orders of H.Q., R.F.C., at St. Omer. During this period the squadron gained its first great honour, a Victoria Cross. On July 31 Capt. J. A. Liddell went out in a R.E.5 on reconnaissance with 2nd Lt. R. H. Peck as observer. They were attacked by an enemy fighter, and the pilot was wounded in the thigh and fainted from pain and loss of blood. The machine fell 3,000 ft. and turned upside down. Then the pilot regained consciousness and got control of the machine once more. He landed on a Belgian aerodrome near Furnes, though how he managed to put his machine down safely mystified everyone, as the control wheel and throttle control had been smashed by enemy bullets, and one undercarriage strut was so badly shot about that it seemed a miracle for it to stand the landing stress. Liddell was given the Victoria Cross, but died in hospital from his wounds. Peck survived his terrifying experience, and is now a Wing Commander in the Operations and Intelligence branch of the Air Ministry.

On September 12 the squadron moved to Drogladht and



Officers and Pilots of No. 58 B.S. :—Front Row (left to right) : F/O. A. T. Orchard ; F/O. J. B. Knapp ; F/O. C. S. Gill ; F/O. L. E. A. Wright ; Flt. Lt. H. G. P. Ovenden ; Sqd. Ldr. J. H. Simpson ; Group Capt. J. R. W. Smyth-Pigott, D.S.O. ; Wing Com. L. L. Maclean ; Sqd. Ldr. G. F. Smylie, D.F.C. ; Flt. Lt. W. L. Payne ; F/O. M. G. R. Harris ; F/O. F. C. Allen ; F/O. H. G. Hamilton ; F/O. G. E. S. Williams. Back Row (left to right) : Sgt. E. R. Butcher ; Sgt. E. S. Butler ; F/O. G. B. S. Monypenny ; F/O. D. A. Craik ; F/O. J. A. Dobson ; F/O. A. P. Miller ; F/O. T. H. Wilson ; F/O. A. W. B. Page ; Sgt. H. Duro ; Sgt. A. E. Morton. (FLIGHT Photo.)





Three "Virginias" of No. 58 (Bomber) Squadron on day raid. (FLIGHT Photo.)

joined the 2nd Wing under Lt. Col. J. M. Salmond. The Battle of Loos opened on the 25th of the month, and next day No. 7 Squadron further distinguished itself. Lt. M. G. Christie, accompanied by a machine of No. 5 Squadron, dropped bombs on the locomotive sheds at Valenciennes from 4,800 ft. He hit two ammunition trains, and 20 trucks of shells exploded. This must have greatly helped the infantry in their attack. Christie afterwards was decorated with the C.M.G., the D.S.O. and the M.C. He rose to be Group Captain, and is now on the retired list.

After the battle of Loos, Major F. J. L. Cogan took command of No. 7 Squadron, and on November 12 the squadron moved to Bailleul.

In July, 1916, the series of Somme battles commenced. Major R. M. Vaughan took command of No. 7, and under him the squadron played its full part in the great and successful efforts made by the R.F.C. to help the infantry and the guns in that long, dreary struggle. First "C" flight was moved south to work with the Australians, and was for the time attached to No. 4 Squadron. By the end of the month the rest of the squadron had followed and was stationed at Warlay aerodrome. It took over the work of No. 1 Anzac Corps. It formed part of the 15th Wing, in which the other squadrons were Nos. 4 and 15. During August the Australians pushed their way to Mouquet Farm. The war diary of the 1st Australian Division has the following record: "The 7th Squadron, R.F.C., have been called upon daily during the operations for photographs, and have supplied them about four or five

hours after the demand. These photographs have been of the greatest assistance in locating our own and the enemy's position, and have formed the basis on which orders have been issued."

It was during the early months of the Somme battles that the R.F.C. obtained the greatest degree of mastery of the air ever attained by either side during the war. It was seldom that enemy fighters attempted to do much to interfere with our machines. Nevertheless, on occasion our artillery machines had to fight for their lives. On September 12 a machine of No. 7 was directing artillery fire near Pozières, when a squat enemy fighter dived on to it. The observer of No. 7 knelt on his seat, took aim with his machine gun and sent the German down in flames.

Bringing back accurate reports of the limits of an advance was work of the highest importance to generals and staffs. Once the infantry had grasped the importance of making signals to our aeroplanes, very valuable reports could be sent back with speed. On September 15, 1916, the Canadians attacked the village of Courcellette at 6 p.m., and an hour later the observers of No. 7 Squadron saw a semi-circle of flares round the village, showing that the capture had been completed.

Another incident of this fight which shows the spirit of No. 7 Squadron is on record. Lt. Gordon-Kidd and an observer were flying over the battlefield in the evening when the observer spotted eight field guns in a sunken road. He gave the wireless call for shrapnel to be turned on to them, and the shells duly began to burst over the

batteries, but the Germans stuck to their guns. The pilot then dived on to them, using his forward machine gun. He saw a number of Germans fall, and then got home with many hits on his own machine.

Maj. A. T. Whitelock took command of the squadron in September, 1916. This officer is now a Wing Commander, and is in command of the R.A.F. Stores Depot at Karachi. The squadron continued its good work under him. In the attack on the Regina trench on October 21 Nos. 4 and 7 Squadrons were both busy turning our guns on to hostile batteries and silencing them. But on the same day something happened which wore a different complexion. Oswald Boelcke had been entrusted by the German authorities with the task of organising fighting formations to break the British air supremacy on the Somme. That day his *jagdstaffel* found an artillery machine of No. 7 Squadron and shot it down in flames. There were to be other such losses. During the attack on Beaumont Hamel in November the three squadrons, Nos. 4, 7 and 15, had a busy time bringing our gunfire on to enemy trenches, which they saw to be fully manned and on to batteries which were giving trouble to our troops. At the same time the contact patrol machines reported the advance of our line. No. 7 lost one such machine, which was shot down into the German lines behind Beaumont.

The year 1917 saw the battles of Arras. No. 7 Squadron had its establishment increased from 15 to 21 machines, being given six from the reserve at R.F.C., H.Q. Early in the year the squadron had moved to Moreuil, near Amiens, and in May to Proven E., where it came under the 2nd Wing. In June of that year the B.E.2.D and B.E.2.E. machines were all exchanged for R.E.8's. The squadron took its share in the Arras battles, but it is not possible in the space at our command to follow all its adventures. In October, 1917, Maj. B. E. Sutton, D.S.O., M.C., assumed command, and the squadron returned to the 2nd Wing in the 2nd Brigade. Maj. Sutton in due course rose to be Group Captain, and is now an instructor at the Imperial Defence College. Throughout the final year of the war the squadron moved about a good deal. It was at Menin when the Armistice was signed. On the last day of that year Maj. R. E. Saul, D.F.C., took over command. He is now a Wing Commander, and is stationed at the School of Army Co-operation at Old Sarum. The squadron remained with the Air Force of Occupation until September 10, 1919, when it returned to England and was disbanded at the end of the year at Eastleigh.

On June 1, 1923, No. 7 began to reform at Bircham Newton, and commenced its new career as a night bomber squadron.

#### No. 58 (Bomber) Squadron

No. 58 (Bomber) Squadron is one of the squadrons of the present Royal Air Force which is now engaged in the same capacity as that by which it made a name for itself in the war. It was and is a night-bomber squadron. It is a distinction to be a night-bomber squadron, because there have never been more than a few of such units, and their work is entirely different to any other branch of air work. It has its special difficulties and its special compensations. One of the compensations in the late war, and it was no light one, was that casualties due to enemy action were very few compared with the losses of the squadrons which flew by day. It is not at all certain, however, that the same will hold good in the next war.

Night bombing did not become really popular until rather late in the war, and No. 58 had been in existence for two years before its F.E.2B's began to spoil the Germans' sleep o' nights. Like most other squadrons it began life as a nucleus flight split off from a parent squadron. In this case the parent was No. 36 Home Defence Squadron at Cramlington. In June, 1916, the new squadron was completely detached, and became a separate entity, a training squadron, under the command of Capt. (later Major) E. D. Horsfall. Until January, 1918, the squadron remained in England, sending out a stream of trained pilots to other squadrons in France. No readable history can be written about the work of a training unit, but none the less its daily work is of absorbing interest, and the importance of that work cannot be overestimated.

Late in November, 1917, the squadron was warned for duties in France. It was either equipped with, or destined to be equipped with, D.H.9 day-bomber aeroplanes. In December, however, the definite decision was made that it was to be a night-bomber squadron, and the type allotted to it was the F.E.2.B. with 160-h.p. Beardmore engine. This useful pusher had done great work as a two-seater fighter until that work was taken over by the Bristol Fighter and by a series of so-called "scout" single-seaters. The clear view in front which the pusher gave to the observer made it the best type available at that time for bombing by night. The squadron mobilised at Dover, and early in 1918 it crossed to France under the command of Maj. J. H. S. Tyssen. On January 10 it reached St. Omer. Its first service aerodrome was at Theizennes, near Aire, and it was taken into the 9th Wing, R.F.C. On February 1, however, the squadron moved to Clairmarais, near St. Omer, where it became very busy for the next month. The squadron comprised 43 officers, over half of whom had not been in France before. Maj. Tyssen and a few others had had two previous periods of active service. Maj. Tyssen is now a Group Captain, has a M.C., and is in command at Gosport.

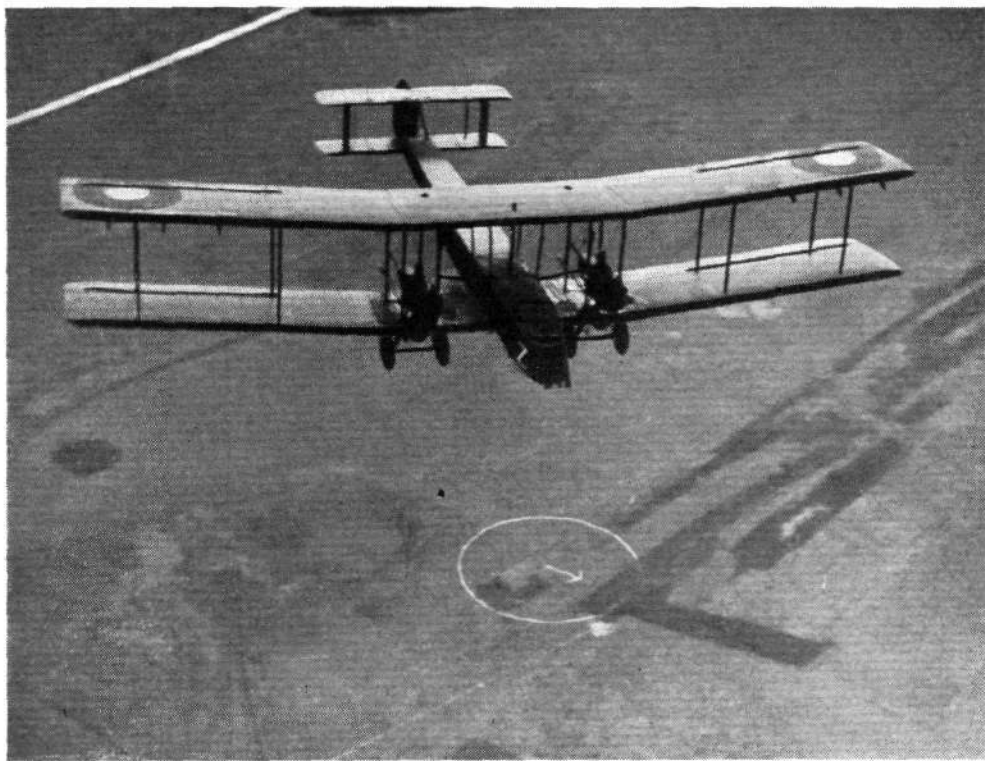
On the night of 2nd/3rd, within 24 hr. of arriving at Clairmarais, the squadron sent out its first night raid over the German aerodrome at Rumbeke. It was a foggy night, and several of the pilots had to land on other aerodromes. At one of these, Droglandt, landing flares were mounted on poles, and a pilot of No. 58 misjudged his landing and ran into a ditch. The F.E. turned over, and the propeller hit the observer, Lt. Kearsley, on the head, killing him instantly.

On February 16 the squadron sent out two raids, six machines to Rumbeke aerodrome and six to Marquain aerodrome. The buildings on the latter were reported to be set on fire. While these raids were out, an enemy aeroplane came over Clairmarais at what was described as "a terrific height," so high that his engine could just be heard and no fire was opened on him. He proceeded to bomb what he thought was the Clairmarais aerodrome with considerable accuracy. The squadron, however, had taken the precaution to light up a dummy aerodrome, and this bore the brunt of the exalted enemy's attention. Soon after this, nearly



Bombing up : Fixing a 550-lb. bomb in its rack. (FLIGHT Photo.)





Over the bombing target. Night bombers do not bomb from such a low altitude, but no picture could be made from their normal height. (FLIGHT Photo.)

all the squadron went down with ptomaine poisoning, but as the weather was "dud," this did not interfere with work. By the end of February the F.E.'s. were in the air again, and in a raid on February 28 three of them actually started off carrying 230 pounds of bombs apiece. Some of the machines had to turn back from engine trouble. Other machines on the same raid scored hits on the sidings at Grandglise and the railway station at Fresnes.

In March some squadrons were moved south to help the 5th Army to meet the great German push, and in consequence No. 58 came under the 54th Wing. About the same time the squadron commenced a new class of work, namely, night reconnaissance. The first was made by Capt. Brewer with 2nd Lt. D. S. Broadhurst as observer. The night was foggy, and the machine was driven down low. The radiator was hit by bullets, and Brewer only succeeded in getting into No Man's Land, where the machine crashed. The pilot's jaw was broken, and Broadhurst, the observer, was pinned underneath in an unconscious condition. Brewer, despite his painful injury, contrived to free his companion, and carried him to the shelter of a shell hole. Naturally, the German trenches fired at them during this operation, and Brewer was hit in the thigh. Two hours later, Broadhurst regained consciousness, and then the two were able to reach the British trenches. For his resolute conduct Brewer was awarded the Military Cross.

About this time the squadron carried out some interesting experiments with a 1.59-in. gun, which fired a 2-lb. shell. For a time the observers seem to have got a good deal of enjoyment out of it. The enemy were much upset when such a shell came at them from above at night time, and many a searchlight and machine gun was deserted by its terror-stricken crew when attacked in this way. But the gun was difficult to handle, and its rate of fire was very slow. After a few weeks it was held that it was not worth so much as the same weight in bombs.

The squadron's record night's work was carried out on the night of March 26-27, when the machines did 504 hours' flying. They were engaged in bombing Bapaume, Albert and Peronne, and some officers made no less than four trips that night, returning to load up as each lot of bombs was discharged. The three towns in question had but troubled sleep that night.

A day or two before this record was made the squadron had moved from Clairmarais. "A" flight went to Auchel to work with No. 83, and the other two flights to Izelle-Hameau to work with No. 102. To put up a record when thus split up says much for the efficiency of the various flights of the squadron. On the last day of March "B" and "C" flights rejoined H.Q. at Auchel. From

this aerodrome the squadron chiefly attacked railway stations, especially those at Dechy, Douai, Haubourdin, Don and Comines. On one night a total of 293 25-lb. bombs and 43 112-lb. bombs were dropped, which amounted to nearly 5½ tons, and was the greatest weight dropped in one night by the F.E.2.B's.

Auchel aerodrome was a bad one. It was surrounded by slag heaps and other obstructions, and its surface was very rough. On one side there was a miniature precipice. Being about the only possible site in this coal district, it was marked down by the enemy, and one night the squadron was warned that the aerodrome was to be shelled to bits by long-range guns. It was ordered to get ready for a move on the instant to Alquines. Everything was packed up, the machines were scattered about the aerodrome, and the squadron sat up all night wrapped in great coats, waiting for a deluge of shell. Nothing happened. On April 23, however, the squadron did move to Fauquembergues, between Boulogne and Bethune. Eleven days later Auchel was actually shelled out. No. 83 Squadron was there.

From its new aerodrome No. 58 made a night attack on the naval base at Bruges. On May 22-23 twelve machines took off. They met with strong opposition, but ten of them got through a barrage of violent anti-aircraft fire. In all 11 112-lb. and 85 25-lb. bombs were dropped from heights varying from 1,500 to 4,000 ft., and some direct hits were claimed.

Enemy night bombers now began to grow offensive, so, towards the end of May some night-flying "Camels" from No. 45 Squadron were sent to protect Fauquembergues. Before long one of the "Camels" shot down a "Friedrichshafen" in flames behind the British lines.

On June 25 the C.O., Maj. Tyssen, was badly shaken in a crash and had to go to hospital. He was succeeded by the senior flight commander, Capt. D. Gilley, D.F.C., who was promoted to major and became permanent C.O. He is now on the retired list of the R.A.F.

In July one machine was forced to land behind the enemy's lines. The observer sent off two W/T. messages: "Engine conked, impossible to make lines," and soon after "Good luck all." A few nights later there was another forced landing near Bethune, but the machine hit a house, and the pilot, Lt. H. G. Jeffery, was killed. The observer escaped with broken bones.

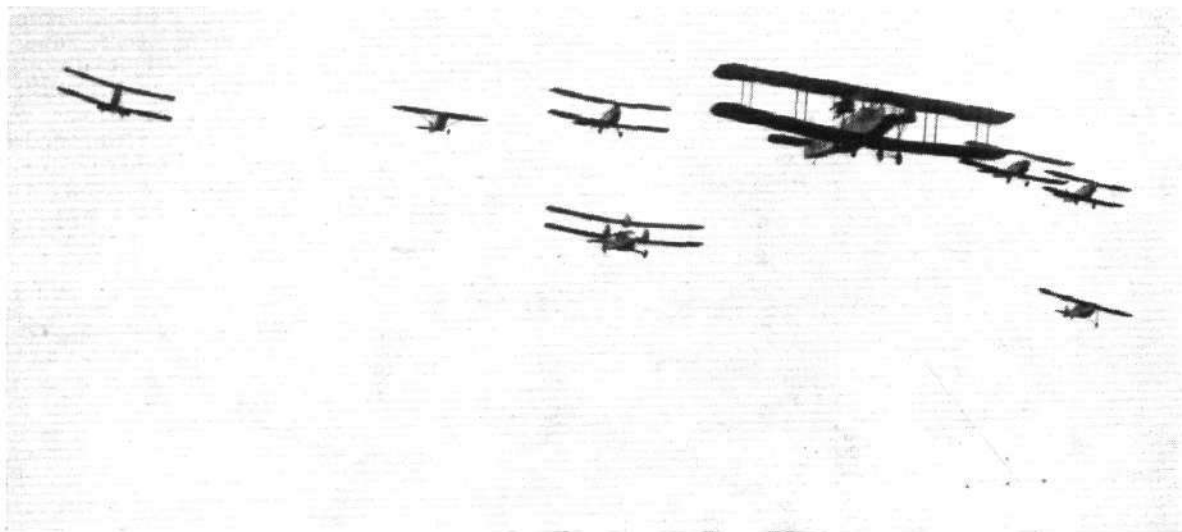
In October, 1918, the squadron was at Alquines, where it said good-bye to its F.E. machines and received Handley Pages. This change was a great relief to the officers. They were not expected to reconnoitre, and they no longer needed to make journeys to and from one objective in the same night. At the time of the change six pilots and observers, who had left England with the squadron, were still with it. In one night six Handley Page machines dropped 10 tons of bombs on Valenciennes station and a train at Denain.

In the ten months spent by the squadron at the front it dropped over 247 tons of bombs behind the enemy's lines. This is not far short of the total weight dropped on Great Britain by the Germans during the whole war. Most of the work was done by the 112-lb. bomb, with the 25-lb. a good second.

From the Armistice up to the middle of April, 1919, the squadron did a certain amount of passenger carrying. Then it moved to Egypt. Some pilots flew their Handley Pages to Egypt, while others brought Vickers "Vimys" from England. In 1920 the number of the squadron was changed to 70, but it came into being again as No. 58 (Bombing) Squadron at Worthy Down on April 18, 1924. Its equipment then was, and still is, the Vickers "Virginia" with two Napier 450-h.p. "Lion" engines.

(See page 515)

# Private Flying & Gliding



The fly-past of the many and varied types of machines at Bristol. (FLIGHT Photo.)

## The Bristol Summer Meeting

**T**AKING the line of least resistance, the authorities at Bristol arranged for Sir Alan Cobham to hold his "National" Aviation Day Display at Whitchurch Aerodrome instead of themselves staging their usual meeting. The result must have been disappointing from the club members' point of view, because, despite the fact that the Air League Challenge Trophy Race was held during the afternoon, it could not be disguised that the Display resolved itself into a series of circus turns mainly calculated to gather in people to participate in joy-rides.

There can be no question that Sir Alan's organisation is doing a very great deal to awaken the interest of the public in flying, but we cannot believe that the type of people to whom his show appeals are likely to be of permanent use to a flying club. For example, during the course of the afternoon the Air-Speed "Ferry" was run to Cardiff, ostensibly to inaugurate an air service to that city, all the persuasive powers of the announcer at the microphone, however, only serving to secure three or four passengers. Now in July Capt. C. D. Barnard is running a 40-min. service between Bristol and Cardiff with his "Fokker" (Jupiter) for a fortnight as a trial to see whether there will be sufficient traffic to justify its retention as a permanency. Already, by way of feeling the

pulse, he has done considerable propaganda work among the business people of both cities; those are the potential users of a line like that—not joy-riding crowds just out for amusement.

It seemed to be a feature of the "National" Aviation Day Display, as given at Bristol on Saturday, for the broadcast announcer to make constant reference to the thrills and the risks which the pilots were giving and taking, and yet at the same time he invited the public to pay their money to share those risks.

Take the case of aerobatic flights. We were treated to the spectacle of ancient machines with rotary engines being looped, and thrown over in a stalled turn-cum-corkscrew roll, with two passengers in the rear cockpit, neither of whom appeared to have even ordinary safety belts on! One of these same machines later went up with one passenger in the rear cockpit while a man was allowed to walk about the wings, climb on top of the centre-section, and stand there; by way of a finale the machine was looped with this man sitting on one of the wheels! A stress analysis of that undercarriage under these conditions should be, shall we say, instructive? That is, however, not the end of the story, for we understand that shortly the passenger in this machine who naturally has to pay far more than for an ordinary flight, will be able to sit and



Mr. Norman Edgar's depôt with three of his Parnall "Elfs" and a "Wee Bee" lined up for inspection. (FLIGHT Photo.)





The Phillips & Powis "Desoutter" (Hermes) piloted by Mr. S. Cliff (portrait on right) winning by a short head from Mr. Norman Edgar in the "Elf" (Hermes). (FLIGHT Photos.)

watch his wing-walking companion scale a ladder and climb into another aircraft flying above him.

We should have thought that aerobatics under these conditions would have satisfied most folk, but apparently the organisers of this Display think otherwise, for, firstly, the wing-walking expert does not wear even an emergency parachute, whilst at times these evolutions are carried out over, and at a very low height above, the public enclosures, some of the loops starting and finishing at what must have been little more than 100 ft.

If the intention is to stage an "Aerial Circus" with the "World's Premier Stunt Pilots," then we have nothing against it, but that such a display should be advertised as likely to promote air-mindedness and such an interest in flying as will be of value not only to flying clubs, but to all those of us whose bread and butter depends upon the welfare of aviation as a sound and growing business, we certainly cannot agree.

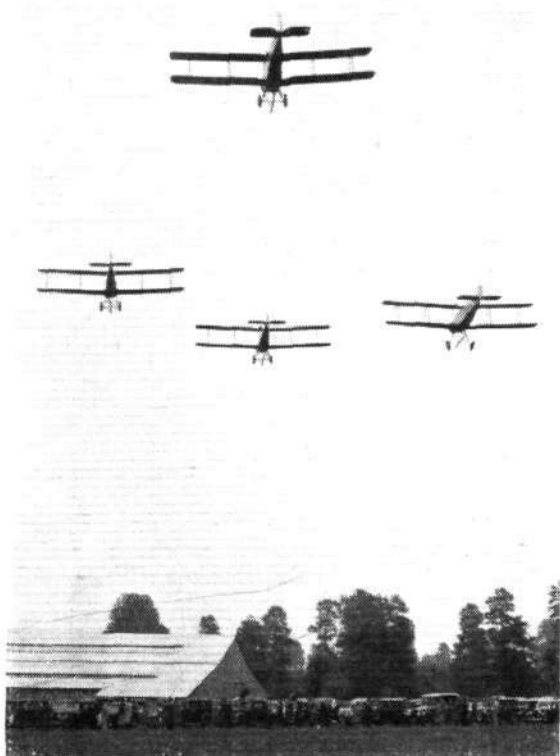
Quite considerable publicity had been given to this meeting, and some dozen visiting aircraft had arrived by the time the Display was due to begin, among which was the demonstration Westland "Wessex" (three Genet Majors), which came over with six passengers, including Capt. R. C. Petter and Capt. A. S. Keep, Directors of Petters, Ltd., and Westland Aircraft Works respectively.

Later in the afternoon Capt. I. Maxwell landed in his Comper "Swift." Capt. Maxwell is a director of Pobjoy Airmotors, Ltd., one of his engines being in the "Swift" which gives a wireless-controlled flying demonstration during these Displays. The wireless receiver is a very neat one, designed by Standard Telephones & Cables, Ltd., and it has already been fitted to quite a large number of light aircraft, it being found of particular use for the reception of the hourly weather reports which are broadcast from the A.A. radio station at Heston.

The Service support which had been expected did not amount to very much, No. 501 (City of Bristol) (Bomber) Squadron, A.A.F., during the afternoon flying over in formation—and in very well-kept formation, too. It was a pity that they did not land, as they have done in former years. Mr. Norman Edgar, who, as our readers well know, has his depôt on the aerodrome, had many aircraft on view, including three Parnall "Elfs" and the old "Wee Bee." He also makes a speciality of providing fast cars for the aeronautical people of the neighbourhood, which probably accounts for the fact that the Bristol meetings are always almost "Olympia-like" with large numbers of the vehicles. On this occasion we ourselves had no reason to feel ashamed of our "ground transport," as a Hillman "Vortic" saloon had been very kindly placed at our disposal, and on the journey down—owing to a very stiff head-

wind—were able to average a speed within measuring distance of two aircraft—albeit, somewhat ancient ones—while crossing Salisbury Plain. From all accounts we had the more comfortable journey!

The race for the Air League Challenge Trophy was a disappointment, only three aircraft lining up at the start, these being the Parnall "Elf" (Hermes II), pilot Mr. Norman Edgar; a "Desoutter" (Hermes II), pilot Mr. S. Cliff; and a "Moth" (Gipsy II), pilot Mr. C. N. Shaw. The course was a triangular one, with turning points at Bedminster, Dundry and Somerdale, so that those on the aerodrome had the aircraft in view almost all the time. Two laps were flown, and the result was a win for the "Desoutter" by a short head from the "Elf." The "Moth" had



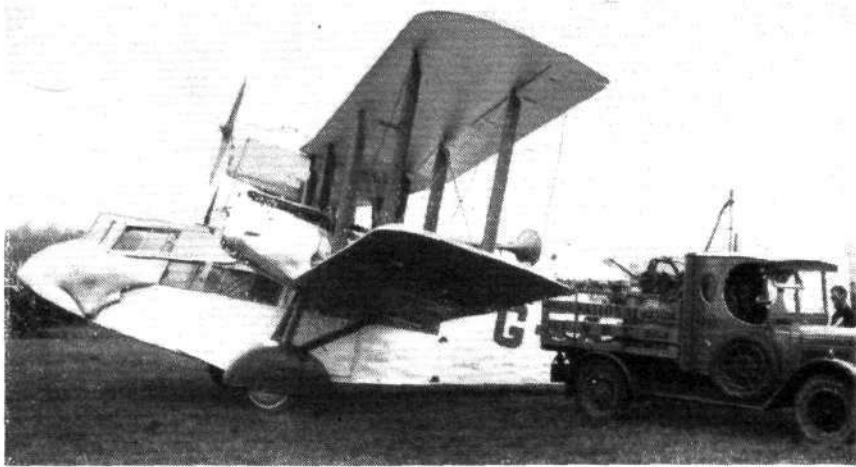
The Cornwall Aviation Company's Avros assisting Sir Alan during the fly-past at Bristol. (FLIGHT Photo.)



Capt. F. S. Barnwell, chief designer to the Bristol Aeroplane Co., discusses some of the aircraft with Capt. L. P. Winters, the aerodrome manager, at Whitchurch. The "background" is a Hillman "Vortic" straight-eight saloon. (FLIGHT Photo.)



The Westland "Wessex" (three Genet Majors) which came over from Yeovil. (FLIGHT Photo.)



Re-fuelling the "Airspeed Ferry" with National Benzole Mixture, a standard fuel equally suitable for aircraft engines or motor cars. (FLIGHT Photo.)

been hardly treated by the handicapper, and was a long way behind. Mr. Cliff is the local pilot for Phillips & Powis, Ltd., of Reading, and the "Desoutter" he was flying is one of the aircraft he maintains at Bristol Airport for joy-riding. Immediately after the race he took advantage of the crowd on the aerodrome, and until dusk was kept busy taking up passengers. His "Spartan" (Hermes), flown by Mr. F. G. Miles, was equally busy, so between them they must have done quite a nice amount of business.

On the way back we stayed at one of the most delightfully comfortable hotels imaginable—the Coombe House Hotel—which is situated a short distance east of Shaftes-

bury, on the main Salisbury road. In keeping with modern tendencies, the proprietors wish to cater for those who fly, and are therefore looking into the question of clearing a large field adjoining the drive to the house, as a landing ground. Light aircraft have actually landed there already, but until certain trees have been removed we should not be justified in advising people who do not know the ground well to attempt a landing. At a later date we shall have more to say about this, and until then we advise anyone who is motoring that way to stop and have a look round for themselves; its unique country-house atmosphere will certainly appeal to most people, especially those who like peace and quietude.

### ISLE OF MAN AIR RACE

This race, as already announced in FLIGHT, takes place on Saturday, June 18, at 2.30 p.m. All competitors are asked to rally at Stanley Park aerodrome, Blackpool, by 4.0 p.m. on Friday, June 17, whence they will be escorted to the Island by a flying boat leaving at 5.0 p.m. After the race there will be several aerobatic displays, competitions in balloon-bursting, and a taxiing race. The return to Blackpool will again be escorted by a flying boat, and will be made at 11.0 a.m. on Sunday, June 19. All the competitors will, on arrival at Stanley Park, be the guests of the Blackpool Corporation. The race and all the flying displays will be organised by the Lancashire Aero Club.

The following have been accepted as reserves only:—Sir Kenneth Crossley, "Moth"; Miss F. Crossley, "Swift"; Miss Sale Barker, "Puss Moth"; M. A. Lacayo, "Swift."

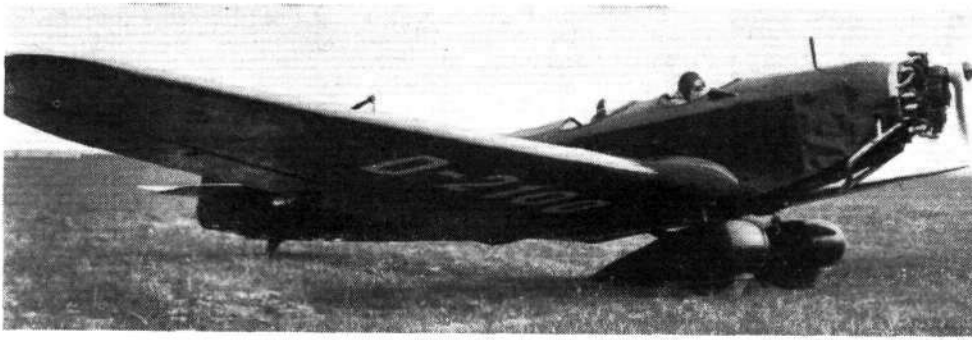
The accepted entries for the race are as follows:—

ENTRANT.	PILOT.	AIRCRAFT.
J. R. Ashwell-Cooke .. ..	Major H. C. Petre, D.S.O.	Moth (Cirrus)
British Amphibious Air Lines, Ltd.	R. C. T. Monk ..	Cutty Sark (2 Gipsys)
F. R. Walker .. ..	G. Clapham .. ..	Swift (Pobjoy)
Miss W. Brown .. ..	Miss W. Brown ..	Avian (Hermes)
Lancashire Aero Club ..	S. Hawley .. ..	Avian (Cirrus)
Do. .. ..	K. Twemlow .. ..	Moth (Cirrus)
Do. .. ..	R. F. Hall .. ..	Avian (Hermes)
C. S. Napier .. ..	C. S. Napier .. ..	Widgeon (Gipsy)
A. V. Roe & Co., Ltd. ..	R. H. Dobson ..	Avro Cadet (7 cyl. Genet)
Lord Malcolm Douglas Hamilton	Lord Malcolm Douglas Hamilton	Puss Moth (Gipsy)



A new version of that excellent aircraft for joy-riding—the Spartan 3-seater—which was seen at Heston during Henly's Rally on Saturday, June 4. (FLIGHT Photo.)





Count Arco-Zinneberg and Capt. Bistritschan starting on the Austrian Rund-Flug in the former's Klemm (Pobjoy).

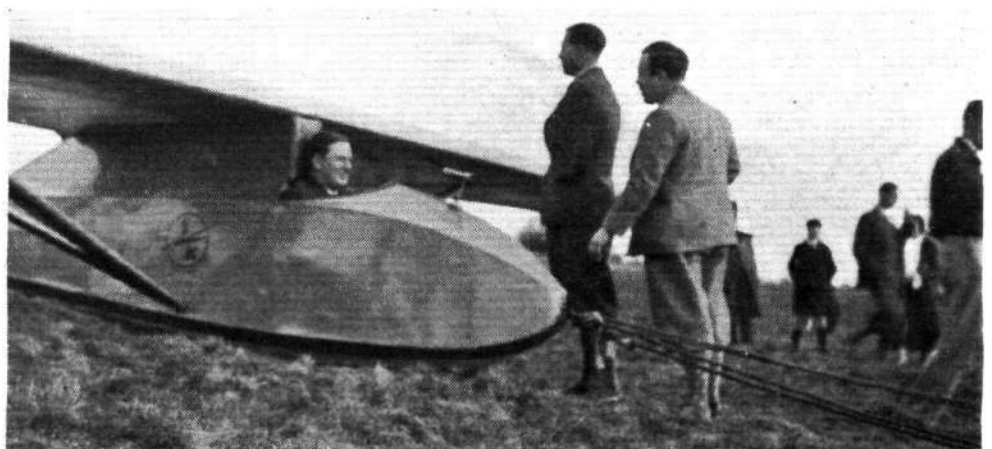
## THE AUSTRIAN RUND-FLUG

The Austrian Rund-Flug started in 1912 when a silver cup was given to be competed for annually, and it is one of the oldest institutions of its kind. Since that time, however, the vicissitudes of that country have prohibited its revival, and it was not until May 14, 15 and 16 of this year that the cup was again flown for. The route for the first day was from Aspern (Vienna) via Linz, Salzburg and München to Innsbrück; for the second day the competitors had to fly from Innsbrück to Salzburg, Klagenfurt and Graz; while on the third day they continued from Graz to Wiener Neustadt and then via Eisenstadt back to Aspern. There were 17 competitors, flying one Klemm (Pobjoy "R"), two "Puss Moths" (Gipsy III), two "Moths" (Gipsy II), one "Phoenix" (Siemens S.H. 11), four "Flamingos" (Siemens S.H. 14), one Klemm (Salmson), two "Grandenburger" (185-h.p. Daimler), one "Hopfner" (Walter 75-h.p.), one "Hopfner" (Gipsy III), two "Hopfner" (Siemens S.H. 14). The first prize was shared by Herr N. Eltz on one of the "Moths" who tied with Capt. Brumovsky in the "Phoenix." Count Arco-Zinneberg with Capt. Bistritschan obtained second prize in the Klemm (Pobjoy), while Col. Eccher in a "Flamingo" was third. Just as in England the Klemm with the Pobjoy engine appears to have astonished everyone with its performance. During the Rund-Flug the Alps had to be crossed at a height of approximately 11,000 ft. on three occasions. On April 9 Capt. Bistritschan flew this machine to Italy, crossing the mountains at 16,400 ft. At the time of writing he is at Hooton Park visiting the Pobjoy works, but by the time this appears in print he will have returned to Vienna. He is an old Austrian cavalry man and a war-time pilot, having learnt to fly in 1913, and we hear that, together with Capt. I. C. Maxwell and Flt. Lt. Nick Comper, much midnight oil was burnt yarning over war experiences.

## HANWORTH

On Sunday, May 29, 16 members of Hanworth Club flew to Devonshire. They left Hanworth at 2.40 p.m. and flew direct to Haldon Aerodrome, Teignmouth, where the aircraft were left in the very able hands of Mr. Parkhouse; from there they went by motor-coach to Tor Cross Hotel and the following morning flew back to Hanworth via Exeter, Weston-super-Mare and Bristol. The cost per head for the whole trip worked out at £4 10s., which, when it is considered that five of the eight machines were club machines on hire, is not exorbitant.

Flt. Lt. J. B. Wilson, who up to recently was flying for Gibraltar Airways, has now returned to Hanworth as a club instructor. Night-flying instruction was started on June 1 and Flt. Lt. Max Findlay gave dual instruction to 12 members. It is hoped to make this a weekly feature if sufficient support can be obtained. Miss Earhart's "Lockheed Vega," which has been shown at Selfridge's for the past week, was brought from Londonderry by an N.F.S. crew travelling the whole way on the same lorry.



Flt. Lt. J. Armour pilots a "Professor" at the London Gliding Club's ground on Dunstable Downs at Totterhoe.

## READING

The number of foreign pupils being taught at Reading continues to increase, thereby emphasising the international character of the club. During the last week Mr. Malmstroem, a Swedish subject, made his first solo flight.

Mr. C. W. Scott, one of the latest private owners, is now undergoing the blind-flying course which has been started at the Phillips & Powis School, as he feels, and very rightly, that being able to fly with confidence through thick weather solely by the aid of instruments should assist him greatly during his trip

to Burma upon which he is starting shortly. Such an attitude towards flying is a very sound one indeed, and it cannot be long before the ability to fly by instruments alone will be considered a necessary part of every pilot's training. During such trips as Mr. Scott proposes to make thick and awkward weather conditions cannot always be avoided, and on such journeys it is even far safer to fly through the clouds by instruments than it is to risk the hazard of a forced landing in unknown country, or, alternatively, to dodge about among the tree tops.

Preparations are going ahead for the "At Home" on Saturday, June 18, on which date a ladies' race will also be held. The afternoon will not merely be one of the stereotyped flying displays, but will be as far as possible a garden party, during the course of which there will be some flying to be watched.

## LIVERPOOL AERO CLUB

The amount of flying done by club machines was considerably more during March and April than that during the similar months of 1931, but slightly less during May owing to the unprecedented amount of rain, the total for the three months being 547 for 1932 as against 563 for 1931. A "Puss Moth" has now been obtained by the club, the flying charges for which will be 36s. per hour, dual or solo, when occupied by two club members, and 42s. per hour when occupied by three persons. The hire rates for this machine for general taxi work will be 6d. per air mile, no extra charge being made if two passengers are carried. This rate is for non-members, that for associate members being on a cheaper scale. Waiting charges after the first 1½ hours at a destination will be 10s. per hour up to sunset from Mondays to Fridays and 20s. for the same period on Saturdays and Sundays. From sunset to 9 a.m. the charge, inclusive of aerodrome fees, pilot's lodging, etc., will be 30s. Those wishing to make use of these facilities should phone the Secretary's office, Hooton 149, during normal hours, or 148 or 150 in emergency. Passengers may be picked up at Speke Aerodrome without extra charge.

## LONDON-NEWCASTLE AIR RACE

The London-Newcastle Air Race which should have been run at the Brooklands meeting on Saturday, May 28,



Left to right : Herr Karl Winkler ; Capt. Norman Blackburn (Director and Manager of North Sea Aerial & General Transport Co. Flying School) ; Herr Kurt Breugmann. Taken before a Blackburn "Bluebird IV" upon which these two German visitors have recently learnt to fly at Brough.

and which was afterwards announced as having been postponed until June 18, has now been abandoned indefinitely, as this latter date has since been found to be impracticable.

#### NOTTINGHAM FLYING CLUB

A pageant will be held at Tollerton Aerodrome by the Nottingham Flying Club on June 18. A Flight from No. 1 (Fighter) Squadron from Tangmere will support the programme, and naturally their Hawker "Furies" (Kestrel engines) will be the centre of interest during the afternoon. The programme is timed to begin at 2.30 p.m., but there will be a prize awarded to the visiting pilot who arrives nearest to 12.30 p.m. British summer time. It is hoped that many who will be flying up to attend the night flying display at Ratcliffe later in the evening will first of all put in an appearance at Tollerton.

#### BROOKLANDS

An endeavour is being made to arrange fortnightly "At Homes" at which different types of aircraft will be demonstrated. On these occasions there will also be a large number of used aircraft shown which are for sale. A display like this should greatly assist prospective purchasers, as they will be able to compare one type with another. This arrangement should also assist private owners who wish to sell their machines, as it will give them a chance to get in touch with people who are likely to be interested. The club which has been started by the pupils of the College of Aeronautical Engineering is already alive and going ahead, and the members have done a considerable amount of dual instruction on their machine. At the Brooklands School of Flying Mr. Eric Leigh has completed the necessary time for his "A" licence, while Mr. Gadgil, the Indian subject to whom we have referred on previous occasions, has obtained his "B" licence. The "Tatler"

Concours d'Elegance, which had to be postponed owing to wet weather on May 28, will be held on Sunday, June 26, the day following the R.A.F. Display at Hendon. This date will also coincide with one of the "At Homes" and it is hoped that a large crowd will accept the invitation to be present.

#### AT YEADON

Four new members have joined the Yorkshire Aeroplane Club during the past month and the membership of the club has grown steadily since the move was made from Sherburn. Despite exceptionally bad weather the amount of flying has increased. The landing area has now been improved greatly by the draining work which has been done and also by the removal of several stone walls. Visitors by air during the month included the Marquis of Clydesdale, Lord Grimthorpe and Messrs. Horne, Lovesey, Thompson and Dawson.

#### LONDON GLIDING CLUB

A considerable amount of work has been put in on the site of the London Gliding Club during the last few week-ends. A heavy west wind working round to south west during the day on Sunday, May 22, enabled three *ab initio* members to gain their "C" licences, as well as many soaring flights to be made on the "Professor," "Prüfling" and "Dagling." The member making the last flight of the day on the "Professor" was unfortunately unable to regain his starting point and finished in a distant field. The "Hols der Teufel" and "Kassel 20" also made many flights, although lulls in the wind hindered both them and the other machines. The soaring time during this day amounted to over 6 hours. Sunday, May 29, was a rainy day with only a light breeze along the ridge. Many members, however, put in some good work on the "Zögling" at the foot of the hill, but no soaring was possible.



Miss Winifred Spooner at Heston being congratulated by her friends after her magnificent flight in the "Morning Post" Race on May 21. Mrs. Nigel Norman is on the left and Miss "Susan" Slade on the right. (FLIGHT Photo.)



The reliable Cirrus engine is as well known in the Americas as it is in England and here may be seen the latest Great Lakes Sports Trainer with the American Cirrus HI-Drive inverted engine. The undercarriage also appears to be fitted with Goodyear airwheels.





J. D. Siddeley,  
C.B.E., F.R.Ae.S.

# 1932 BIRTHDAY HONOURS

Amongst the names given in the official list of honours conferred by His Majesty The King on the occasion of His 67th birthday, are the following, directly, or indirectly, connected with aviation—Military and Civil



Air Com. C. E. Kingsford-Smith, M.C., A.F.C.

## THE PRINCE OF WALES

*Auxiliary Air Force.—General Duties Branch.*—Air Marshal His Royal Highness the Prince of Wales, K.G., K.T., K.P., G.C.S.I., G.C.M.G., G.C.I.E., G.C.V.O., G.B.E., M.C., Personal A.D.C. to the King, is appointed Honorary Air Commodore-in-Chief of the Squadrons comprising the Auxiliary Air Force.

## THE DUKE OF YORK

*Royal Air Force.—General Duties Branch.*—Group Captain His Royal Highness Albert Frederick Arthur George, Duke of York, K.G., K.T., G.C.M.G., G.C.V.O., Personal A.D.C. to the King is promoted to the rank of Air Vice-Marshal (June 3).

### Viscount

The Right Hon. Stanley Owen Buckmaster, Baron, G.C.V.O., Lord Chancellor, 1915-16, Chairman of the Governing Body of the Imperial College of Science and Technology.

### Knights Bachelor

John Davenport Siddeley, Esq., C.B.E., F.R.Ae.S., Chairman and Managing Director of Armstrong Siddeley Motors, Ltd.; for public services in connection with mechanical development in the Defence Forces.

Air Commodore Charles Edward Kingsford-Smith, M.C., A.F.C.; for services to aviation in the Commonwealth of Australia.

### Order of the Bath (Military Division)

#### K.C.B.

Air Vice-Marshal Tom Ince Webb-Bowen, C.B., C.M.G., R.A.F.

#### C.B.

Air Vice-Marshal John McIntyre, M.C., M.B., B.Ch., K.H.S., R.A.F.

Major-General Harold Francis Salt, C.M.G., D.S.O. (late Royal Artillery), Commander, Territorial Army Air Defence Formations.

### (Civil Division)

#### C.B.

Christopher Llewellyn Bullock, Esq., C.B., C.B.E., J.P., Secretary, Air Ministry.

### Order of the British Empire (Military Division)

#### O.B.E.

Lieutenant-Colonel and Brevet Colonel William Herbert Rogers, Surrey Group, Anti-Aircraft Searchlight Companies, Royal Engineers, Territorial Army.



## Royal Air Force Squadrons

In connection with our article on Worthydown (Nos. 7 and 58 (Bomber) Squadrons, R.A.F.) on page 503, it may be of interest to note that special articles on other R.A.F. Squadrons have been published in FLIGHT as follow:—

- May 16, 1930. H.M. Aircraft Carrier *Glorious*.
- June 27, 1930. No. 4 (Army Co-operation), South Farnborough; No. 17 (Fighter), Upavon; and No. 33 (Bomber), Eastchurch.
- August 15, 1930. No. 601 (County of London) (Bomber) Sq., A.A.F. (at Lympne).
- September 19, 1930. No. 43 (Fighter) Sq. (Tangmere).
- December 19, 1930. No. 2 (Army Co-operation) Sq. (Manston).

### M.B.E.

Flight Lieutenant Andrew, MacGregor, D.F.C., R.A.F.  
Flight Lieutenant Bernard William Hemsley, R.A.F.  
Flying Officer Thomas Ewart Guttery, R.A.F.

### (Civil Division)

#### K.B.E.

Wing Commander Louis Greig, C.V.O.; for public services to many social and welfare organisations.

#### C.B.E.

Douglas William Gumbley, Esq., O.B.E., I.S.O., Inspector-General, Posts and Telegraphs, and Director of Civil Aviation, Minister of Economics and Communications, Iraq.

Robert Ivor Brenton, Esq., Chief Registrar, Air Ministry.

## Auxiliary Air Force

### No. 601 (County of London) (Bomber) Squadron

The Rt. Hon. Sir Samuel John Gurney Hoare, Bt., G.B.E., C.M.G., D.L., J.P., M.P., resigns his appointment as Honorary Air Commodore on appointment as Honorary Air Commodore of No. 604 (County of Middlesex) (Bomber) Squadron (June 3, 1932).

The Rt. Hon. Sir Philip Albert Gustave David Sassoon, Bt., G.B.E., C.M.G., M.P., is appointed Honorary Air Commodore (June 3, 1932).

### No. 604 (County of Middlesex) (Bomber) Squadron

The Rt. Hon. Sir Samuel John Gurney Hoare, Bt., G.B.E., C.M.G., D.L., J.P., M.P., is appointed Honorary Air Commodore (June 3, 1932).

## Royal Air Force

### Air Force Cross

Flight Lieutenant Charles Edmund Maitland, D.F.C., R.A.F.

Lieutenant Commander Rupert St. Aubyn Malleson, R.N., Flight Lieutenant, R.A.F.

Flying Officer John Bernard Walter Pugh, R.A.F.

### Air Force Medal

22679 Flight Sergeant (Pilot) Edward Fitzgerald Godfray, R.A.F.

## British Empire Medal

### (Military Division)

#### For Meritorious Service

348973 Leading Aircraftman Edward Watts, R.A.F.

- April 24, 1931. No. 101 (Bomber) Sq. (Andover).
- June 12, 1931. Nos. 204 and 209 (Flying-Boat) Sq. (Mount Batten).
- June 26, 1931. "1890-1912-1931." (A Brief Outline of the Growth of the Royal Air Force.)
- July 10, 1931. Cambridge University Air Sq. (at Old Sarum).
- July 17, 1931. Central Flying School (Wittering).
- August 7, 1931. Oxford University Air Sq. (at Eastchurch).
- August 21, 1931. No. 600 (City of London) (Bomber) Sq., A.A.F. (at Tangmere).
- April 1, 1932. No. 605 (County of Warwick) (Bomber) Sq. (at Castle Bromwich).
- May 13, 1932. No. 40 (Bomber) Sq. (Upper Heyford).

# Airport News

## CROYDON

**D**URING the last week little of real interest happened. Quite a large number of private owners visited Croydon, including Messrs. Denman, Norman, Robertson, Allen, Baker, Styran, Malcolm, Beer, Carling, Amhurst, Nelson, Stace, Cathcart-Jones and Gairdner.

The police Autogiro flew to and from Epsom at intervals on Derby Day, this machine proving a vast attraction for the Press photographers, both on the day and the day before.

During the week-end the Pressmen were also in strong evidence on the aerodrome awaiting the arrival of the latest Atlantic flyer, Stanley Hausner. Their vain quest has ended, as it now seems obvious that he has probably lost his life in the attempt.

On Saturday afternoon, *Horatius*, one of the Handley Page 42's of Imperial Airways, visited Heston, and proceeded to carry out joyrides. These machines are very popular with the public. The show at Heston was arranged by Henlys, Ltd., and, I understand, went off very well.

Good business was done by all the firms, joyriding, over the week-end. On Saturday afternoon in particular, the air was alive with joyriding machines, including those of Imperial Airways. The number of visitors to the aerodrome steadily increases.

Surrey Flying Services have recently added two new "Moths" to their fleet of aircraft.

Cirrus Hermes are very busy and several types of machines are in their hangar, including Klemms, "Martlets," "Moths," "Spartans" and D.H. 9's.

The Lord Mayor of London, accompanied by the Lady Mayoress, the Swordbearer, the City Marshal, the Common Cryer, and Serjeant-at-Arms, complete with Mace and Sword, flew to Blackpool on Monday, June 6, a special



The Lord Mayor of London, Sir Maurice Jenks, and party make a tour of inspection of Croydon Aerodrome before flying to Lancashire in a Handley Page 42 airliner on June 6.

Handley Page 42 being earmarked for him and his party. The object of the journey was to open the new Town Hall at Morecambe the next day; the return journey to London by air was fixed for the following Wednesday.

Mr. Pobjoy, whose aero engines bear his name, was here during the week, on a Klemm, fitted with a Pobjoy engine, en route for Germany.

Traffic figures for the week:—Passengers, 1,038; freight, 49 tons. P. B.

## FROM HESTON

**S**UNDAY, May 29 (late news).—Mr. R. Perkins, M.P., returned from Brussels in his "Moth" and another private owner returned from Paris.

Mr. H. P. J. Phillips, Coldstream Guards, qualified for his "A" licence.

**Monday.**—Mr. Tangye left for Brussels in G-AAXX, with one passenger, returning to Heston during the evening.

Lt. Com. Geoffrey Rodd returned from Paris in his "Puss Moth."

Two machines arrived from Ireland with pictures of the Irish Sweepstake draw—G-ABSO, of Messrs. Hillman's fleet of machines, and G-ABDC, of Personal Flying Service, Ltd. Banco brought back a passenger from Lille in their "Puss Moth."

**Tuesday.**—Banco took a passenger to Coldstream, on the Scottish Border, in their "Puss Moth." Dr. Thierry left for Lausanne in a "Moth."

Mr. O. G. E. Roberts qualified for his "A" licence.

Among the pilots who were successful at the last 2nd class Navigators' examination is Mr. Bryan Russell. Mr. Russell was coached for the examination by Capt.

Ferguson, who runs the Ferguson School of Navigation at Heston.

Many of Airwork School of Flying pupils now being in the solo stage, the School was able to report more flying done to-day than on any previous day this year. Even so, the instructors were fully employed teaching future soloists.

The ladies' section of the Hounslow Conservative Association visited Heston Airport this afternoon and, after being shown round, took tea at Heston Verandah while watching the flying. The authorities at Heston Airport will be pleased to conduct parties round the Airport at any time, provided the appointment is made beforehand.

**Wednesday.**—Maj. J. E. D. Shaw was flying his latest acquisition—G-ABVV—an Avro "Cadet," fitted with a 7-cylinder Genet Major engine.

Mr. R. W. E. Cecil qualified for his "A" licence.

Airwork School of Flying had a machine flying over Epsom, with a photographer taking photos of the racing.

Mr. N. B. Fuller arrived from Paris in "Moth" F-AJOO.

**Thursday.**—The "Saro Cloud"—G-ABHG—the property



of Mr. A. E. Guinness, was brought to Heston to-day to be housed there in future.

Flt. Lt. Staniland left for Brussels in a "Puss Moth," returning later in the day.

Air Com. Hon. F. E. Guest arrived in his Hawker "Tomtit" and had some dual instruction with Capt. V. H. Baker, Chief Instructor of Airwork School of Flying, who taught Air Com. Guest to fly originally.

Practice night flying was carried out to test the new flood lighting apparatus recently installed at Heston.

**Friday.**—Flt. Lt. Ivins left for Jersey in his Bristol Fighter carrying one passenger. Dr. Thierry returned from Paris and Heer Ten Bos arrived from Rotterdam in a Pander.

Capt. G. W. E. Heath, R.H.A., made his first solo flight after 6 hr. 50 min. dual instruction.

**Saturday.**—The National Benzol Co's. "Puss Moth," piloted by Mr. J. Scholes, left for Vechta, north of Hannover, with two passengers, to attend the meeting being held there. Mr. Crammond also left for the same destination in his Klemm. Mr. Degtze left for Paris in a "Puss Moth," as did Capt. W. Ledlie in Personal Flying Service Junkers. Capt. Dan Cameron journeyed to Berck in a "Puss Moth" and returned with two passengers. Mr. Ince left for Amsterdam with one passenger in his "Widgeon."

**Sunday.**—The new Sikorsky Amphibian, the property of Mr. Francis Francis, arrived from Southampton. It is a

five-seater cabin machine fitted with two Pratt & Whitney Wasp engines of 420 h.p.

Capt. W. Ledlie, of Personal Flying Service, Ltd., arrived from Paris with three passengers in the Junkers, one of whom was Countess de la Motte. Mr. Horne was another arrival from Paris in his "Moth." Mr. Stace, of Henlys, Ltd., left with one passenger in a Sports "Avian" for Rotterdam and Vechta. Heer Ten Bos with one passenger departed for Berck.

Lt. Cathcart-Jones brought Sir Alfred Beit, Bt., from Sussex to Heston in a Stinson Jnr. Mr. Bourn arrived from Paris in a Stinson Jnr. with two passengers. The "Puss Moth" of Banco left for Bournemouth to pick up two passengers to convey them to Lille.

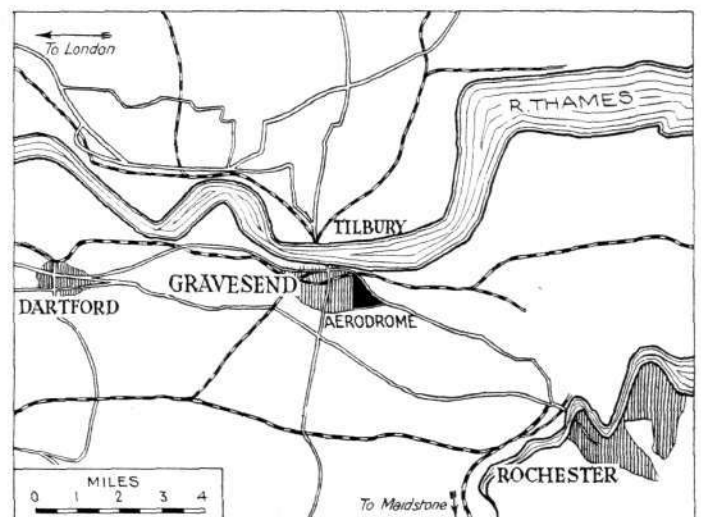
A new system of floodlighting has been installed in co-operation with Chance Bros., Ltd., at Heston, and on Friday evening, June 10, this will be demonstrated. This system is quite new in this country and from 9 o'clock onwards visitors will be able to see how it is possible for a shadow to be thrown from the floodlight so that the pilot may land directly towards the light without being dazzled. This light, which is of the fixed dioptric type, is mounted directly below the control tower in a position so that the whole of the aerodrome is illuminated and all shadows are eliminated. The Shadow-Bar method of shielding this light is such that no matter what direction the wind may be the pilot is never dazzled, even when landing directly into the main beam.

## AN AERODROME AT GRAVESEND

**A**N aerodrome is being established one mile east of Gravesend, on the Thong Road, Chalk, which is between the main Gravesend-Rochester road and the London-Rochester road. The establishment of this aerodrome will, it is hoped, provide an emergency landing ground for both the K.L.M. and Luft Hansa air liners, which on their journey to Croydon pass very close to this aerodrome. We understand that the K.L.M. may even consider its extensive use in bad weather. It is to be lighted for night flying, and, when used in preference to Croydon, will save at least a quarter of an hour's flying time, while the journey to London by the frequent electric train service, which runs at approximately 10-min. intervals, only takes 45 min.

The company which is being formed to operate this aerodrome is to be called the Gravesend Aviation, Ltd., with its registered office at 30, Newgate Street, London, E.C.1 (City 6079). A flying club will be formed, and in conjunction with the Brooklands School of Flying and the Cinque Ports Flying Club at Lympne will operate air-taxi services and provide facilities for joy-riding, repair work, overhauls, and all the usual services found at well-regulated aerodromes. The company has the district agency for de Havilland machines, and will also deal in second-hand aircraft. Mr. A. D. Carroll will be the club's chief instructor, while Mr. Ternan and Mr. Kingham, who are responsible for forming the company, are both qualified pilots. The situation of the aerodrome should make it admirable for all purposes, as it stands on high ground some 250 ft. above the sea level, thus being well clear of river fog and other conditions.

When finished, there will be approximately half a mile clear run in any direction, thus allowing its use for any class of aircraft. At the present time only a small portion of the total 148 acres is down to grass, but it is understood that this is large enough for light aircraft. Communication with Gravesend itself is excellent, and buses pass the foot of Thong road, which is only three minutes' walk from the aerodrome.



A map showing the position of the Gravesend Aerodrome.

### Singapore Airport

WORK is about to begin on the big civil aerodrome at Singapore, which will form an important link in Empire air communications. It will be fully equipped and big enough to deal with a large quantity of all kinds of air transport. The work of preparing the aerodrome, building offices and hangars has brought a number of contracts to British firms.

### International Air Regulations

THE 20th session of the International Commission for Air Navigation has just ended in Paris. Further work was done in defining international standards of airworthiness. Agreement was reached on the types of aeronautical maps and their conventional signs. The Commission discussed the question of an age limit for pilots in commercial aviation, and agreed that the test should be one of fitness rather than of age. It was decided to consider the drawing up of regulations for signals to call the attention of a

ship to an aeroplane in distress and for marking at night seaplanes which, through a forced alighting, have to remain on the sea. Twenty-six States were represented at this session. The principal British members were Lt. Col. F. C. Sheldermine (Director of Civil Aviation), Maj. J. S. Buchanan (Deputy Director of Technical Development), and Mr. R. L. Megarry (Assistant Secretary in charge of the legal branch of the Air Ministry).

### Transit Committee, League of Nations

THE Transit Committee of the League of Nations has finished the work of its seventeenth session and has adopted its report. The work of the committee concerned more particularly passport and visa formalities for emigrants; inland and maritime navigation personnel; results of the fourth general transport conference; air transport co-operation; unification of transport statistics; signature and ratification of agreements on buoyage and lighting of coasts; river law and road traffic.

# Airisms from the Four Winds

## Another Atlantic Flight Failure?

MR. S. HAUSNER, the Polish-American airman who made an unsuccessful start for a flight across the Atlantic on May 29, again took off from Bennett Field, New Jersey, at 2.46 (B.S.T.) on June 3 on a second attempt to cross the Atlantic, with Warsaw as the main objective. He was flying a 220-h.p. Bellanca monoplane, and intended, if possible, to fly non-stop to Warsaw, but might land at Croydon. A machine, probably his, was heard over Macallum, Hermitage Bay, Newfoundland, at 11.40 a.m. (B.S.T.), but after this no further news of him has been received.

## "Graf Zeppelin" to Visit London

ON July 2, at approximately 6 p.m., the *Graf Zeppelin* will once more visit Hanworth Air Park. After disembarking the passengers which she will bring from Germany she will take on board 24 others for a 24-hr. trip round Great Britain. She will return to Hanworth on July 3 and after a further change of passengers make a night voyage back to Friedrichshafen. In the absence of Sqd. Ldr. R. S. Booth, who is paying a visit to the U.S. Airship *Akron*, Capt. G. F. Meager, who was first officer of R.100 during the double crossing of the Atlantic made by that airship in 1930, will be in charge of the landing party. Arrangements for the visit have been made with Dr. Eckener by Col. the Master of Sempill in collaboration with the Hamburg-Amerika line. Berths for the 24-hr. cruise are available at £40 per head, and those who wish to make this flight or the return one to Germany, should communicate with The Master of Sempill, Sardinia House, Kingsway, London, W.C.2 (Holborn 0991).

## Spartan Mailplane's Flight to India

NEXT week Capt. T. Neville Stack, as has already been announced in FLIGHT and at many flying meetings, will be flying the Spartan Mailplane (3 Gipsy III's) to India to demonstrate it to the Government of that country. We understand that he will take with him a mechanic and one other passenger, and that he hopes to make the journey to Karachi in about three days. His route will be over the now well worn one *via* Vienna, Constantinople, Aleppo, Basra, Jask and Karachi. Besides the passengers it is expected that he will carry a reasonably large load, the better to demonstrate the mail carrying possibilities of this machine. An aircraft like this, with its three engines and consequent immunity from forced landings, should be admirable for the operation of mail services in countries where ground transport is slow and tedious owing to the difficult nature of the ground, while its large pay load should make it a sound commercial proposition.

## Farewell Dinner to Miss Earhart

ON Thursday evening, June 2, Mr. C. R. Fairey, M.B.E., F.R.Ae.S., President of the Royal Aeronautical Society, gave Miss Amelia Earhart a farewell dinner at Hamble, and afterwards took her across in his yacht *Evadne* to Cherbourg. Among those present at the dinner and on the yacht were:—Col. the Master of Sempill, A.F.C., F.R.Ae.S., Immediate Past-President of the Society; Lt. Col. F. C. Shelmerdine, C.I.E., O.B.E., A.F.R.Ae.S., Member of Council and Director of Civil Aviation, and Mrs. Shelmerdine; Sqd. Ldr. A. H. Orlebar, A.F.C., and Mrs. Orlebar, and Miss Amy Johnson. At Cherbourg Miss Earhart met her husband, Mr. G. P. Putnam, and later they proceeded to Paris. Here she was given an enthusiastic reception by a large crowd, and in the evening she attended a banquet organised by the National Aeronautic Association. Miss Earhart has received the Order of Chevalier of the Legion of Honour from M. Painlevé, the French Air Minister.

## An Aerial Train

It is reported from Berlin that a pilot named Boenig has succeeded in towing four gliders together to a height of 1,000 ft. at Halle. He used a 120-h.p. sporting aeroplane.

## Swiss Airman Killed

A SWISS airman, M. Fluechiger, left Cointrin for Saint Irigny on May 2 and failed to arrive. His body was later found in the wreckage of his machine on the slopes of Mount Colombier, near Echenevez, in the department of Ain.

## Egypt's Air Corps

THE five "Moth" aeroplanes which are to be the nucleus of the Egyptian air service, and which were flown

out from England, arrived at the new aerodrome of Almaza, near Heliopolis, on June 2. The new aerodrome was opened on this occasion by King Fuad, who held a review of troops. It will be remembered that the "Moths" were being sent out by steamer when the Egyptian Government ordered them to be shipped back from Malta and flown out to Egypt. In connection with this, Air Commodore Board resigned his appointment of Director of the Egyptian Air Service.

## Another Flying Film

A THOROUGHLY interesting film which should be seen by all those who appreciate good acting, especially when coupled with a background of aviation and aerobatic flying, is the "Sky Bride" now being shown at the Plaza. Many of the scenes were evidently taken at the last National Air Races, Cleveland, and one shot appears to be Flt. Lt. Atcherley startling the American crowd with his crazy flying in, we believe, a Curtis "Fledgling." Another shot is also interesting, in that it shows a take-off of the Lockheed "Altair," which was shortly afterwards shipped over here to the Swissair Co. A formation of "Autogiros" comes in to another scene, as does an aircraft works. The story itself is somewhat American, but not aggressively so, and provided they can put up with the demonstrative type of affection between the principals, who show their fondness by knocking each other about, those witnessing this film will certainly not regret the money they have spent on their seats. The acting of Richard Arlen and Jack Okie is first class, while that of Robert Coogan is as amazingly precocious as ever.

## Sir Malcolm Campbell at the Junior Aero Club

THE Junior Aero Club had Sir Malcolm Campbell as its guest of honour at a dinner on Tuesday, June 7. As is the way with these gatherings speeches of the long and often boresome type were absent and in their place the dinner finished up with a mock trial of Sir Malcolm, who was charged with the heinous offence of loitering on the Daytona Beach at a speed of 254 m.p.h. Wing-Com. R. L. G. Marix was the Judge and in a style all his own he conducted the trial to the ultimate satisfaction of both the prisoner and the jury. His technique of the courts was certainly original and his admirable handling of the case—having made it his judgment before the case opened!—made the proceedings commendably brief. Mr. W. Courtney was the prosecuting counsel and although he had only accepted the brief some few seconds before the case came on, he carried through his part in a thoroughly humorous and fluent manner. Col. L. R. Naftzger, a member of the American Bar, undertook to defend the prisoner and although he adopted the brow-beating tactics of gangdom he failed to shake Flight-Lieut. G. Stainforth's statements, who, when cross-examined as a witness for the prosecution, averred that while following on Sir Malcolm's tail he hooted several times but Sir Malcolm refused to obey the rule of the road and let him pass. The finding of the jury under the foremanship of Mr. Eric Teesdale was that of unquestionable guilt, but sentence was withheld after the hearing of an appeal although, in order to save the authorities trouble, Sir Malcolm had already submitted to the degradation of being reduced to the ranks as an ordinary chauffeur!

Towards the end of the trial the club was honoured by the presence of Col. and Mrs. Shelmerdine, who were much amused by the way the proceedings were conducted. After the very excellent dinner, which is always provided by the club, everyone felt in the mood for dancing, which exercise was carried on to the early hours.

## Astrology Helps the Aircraft Industry

PROGNOSTICATION from the portents of the stars has become a feature of the Daily Press. Generally this has been about race horses and love affairs, but help is now given to our aircraft designers:—"The autogyro which appeared over Epsom is the forerunner of great and rapid development in the employment of these machines. Except for long-distance journeys, the existing type of airplane will gradually be superseded by the autogyro, and that before Uranus leaves Aries—i.e., before the end of 1933. In a curious way the full commercial development of television and of the autogyro will synchronise; as one is perfected, so will the other be perfected."—*Sunday Express*.



## Motorists at Heston

*Henlys Ltd., who have their aircraft department at Heston, ran a Rally for their customers on Saturday, June 4, at the aerodrome. Many flying displays were included in the programme and the prizes were presented by Miss Amy Johnson*

**W**E have often averred that the day of the club flying meeting, wherein flying items form the only programme, is fast approaching its end. Some other attraction is necessary in order that the interest of the public who now take aircraft for granted may be sustained. On Saturday Henly's provided this for their customers and others by combining a motor-car gymkhana with a short flying display at Heston Airport. Organised by Mr. A. R. Dark and Mr. B. S. Allen, the programme thoroughly entertained the spectators.

The flying part of the programme consisted of a formation flight by Capt. Baker in a "Moth" (Gipsy II); Flt. Lt. Clarkson, "Moth" (Gipsy II); and Mr. Stace, "Avian" (Gipsy II). After this event Flt. Lt. Clarkson remained in the air to show those present that flying on one's back is just as easy as flying the right way up—at least it looked so when he did it! The "Autogiro," handled by Mr. R. A. C. Brie, showed that all aircraft do not need a long run for landing, and at the conclusion of its demonstration was taken up to about 4,200 ft. over the Southall gasometer to act as the mark for a novel form of race which had emanated from the fertile brain of Mr. Norman. The entrants for this race had to take off according to their handicap and climb up to the "Autogiro." Those who gained first, second and third places were:—Flt. Lt. Max Findlay on Major Cotton's



(L to R) : Mr. R. Denman and Sqd. Ldr. N. Norman, Directors of Airwork, Ltd., with Mr. F. Hough and Mr. H. Henly, Directors of Henlys, Ltd., enjoying the gymkhana.

"Bellanca" (Whirlwind); Mr. M. Jackaman, "Moth" (Gipsy II); and Mr. V. Holman, "Spartan" (Hermes II).

A very fine display of aerobatics was put up by Mr. Stace, assistant to Mr. B. S. Allen, Henly's Aviation manager, in an Avro "Cadet" (7 cyl. Genet), and a parachute drop was made by Mr. Benno de Greeuw, who incidentally made the drop at Skegness last Whitsun but who, owing to an error in the programme, did not get the credit for it. Col. Strange took up Mr. de Greeuw in the latest Spartan 3 Str. which has the pilot in front.

Later Col. Strange in a Spartan "Arrow" made a direct hit with a "bomb" on a car driven by Mr. Edwards.

Joyriding was carried on throughout the meeting by an "H.P.42" of Imperial Airways, by B.A.T. with a "Spartan," and two other companies. The number of people taken up was large, and those who flew over from Croydon in the "H.P.42" thoroughly enjoyed their trip.



The Band of the Coldstream Guards in the foreground competing with the four "Jupiter" engines of *Horatius* at Heston.

# The Industry

## SOUTH AFRICAN ENTERPRISE

**MR. GORDON STORE**, whom, as everyone knows, put up such a very stout show when flying with Miss Peggy Salaman in her "Puss Moth" to break the London-Cape Town record, has now associated himself with Mr. F. A. Duk and Mr. Williamson in a company called Aero Services (Pty.), Ltd. This company was formed in 1930 to take over the assets of the Cape Town Flying Club, which is operating at Young's Field, Wynberg, a site originally chosen by the late Col. G. L. P. Henderson when he started his flying school there.

In the reconstruction of this company it will be properly equipped to carry out air-taxi work, joy-riding, aerial photography and flying instruction. With regard to the latter, it is worth noting that the company aims at a very high standard of instruction conforming in every way with the methods in force at the C.F.S. Pupils will, as well as flying instruction, receive tuition in the theory of flight, navigation and aircraft maintenance.

A comfortable club-house has been erected on the aerodrome, where there are also offices, store rooms, hangars and workshops, and the company is thus able to undertake any description of overhauls to aircraft or engines.

Lt. F. A. Duk is a South African, and until recently was in the South African Air Force, his last command being that of the special Flight S.A.A.F., which operated the Cape Town to Alexandria Bay, Diamond Air Service. He was flying with the R.F.C. and R.A.F. during the war and, of course, holds the South African "B" pilot's licence. Mr. Williamson was also with the R.F.C. and R.A.F. during the war, and has been associated with flying since 1911. He has been very many years in South Africa and, in fact, was one of the earliest private owners of that country. He holds ground engineer's licences, and will be in charge of the Service Department at Wynberg. Mr. Gordon Store, whose technical qualifications are B.Sc.Eng.(Lond.), A.C.G.I., A.F.R.Ae.S., holds a commercial "B" pilot's licence, second-class navigator's certificate, ground engineer's licences, and has completed the short instructor's course at the C.F.S., Wittering. It will be remembered that before his flight to Cape Town he was Assistant Instructor to the London Aeroplane Club. Mr. Store himself is also a South African, and his father has very large business interests in the Union. It may be said, therefore, that the company is a South African one run for South Africans. For joy-riding work they are at present operating a "Spartan" three-seater (Hermes II), one of those which did so extraordinarily well and created such interest during the tour made by Skywork, Ltd. Besides this practical side of the company's operation they also hold agencies for a number of English firms connected with aviation, and will in South

Africa act as these manufacturers' representatives, appointing district agents and arranging demonstrations where necessary. The agencies at present held are those of the Cirrus Hermes Engineering Co. (Engines); Spartan Aircraft, Ltd. (Aircraft); Cellon, Ltd. (Dope); Raynoll Maps, Ltd. (Maps); Reid & Sigrist, Ltd., Air Log Co., Ltd., Kelvin, Bottomley & Baird, Ltd. (Instruments); David Moseley & Sons, Ltd. (Tubes and Cushions, etc.); Irving Air Chute of Great Britain, Ltd. (Parachutes); Standard Telephones & Cables, Ltd. (Radio Equipment); York Street Flax Spinning Co., Ltd. (Fabric); Saunders-Roe, Ltd. (Plywood); the Airscrew Co., Ltd. (Airscrews); Burley, Ltd. (Rubber); Rotherham & Sons, Ltd. (Pipe Unions, etc.). Mr. Gordon Store will also be acting as surveyor and technical adviser for the British Aviation Insurance Co.

## FLYING CLOTHING

**SIDCOT** suits and leather coats are articles of apparel which are necessary to almost every pilot, but when bought new these are both very expensive items. Reliable used (R.A.F.) ones can, however, be bought from Cann's, 6, Portland Place South, London, S.W.8 (Reliance 3464).

## STEEL TRADE CO-OPERATION

**THE** new situation brought about by the imposition of tariffs requires arrangements which have for their object the economical development of all industries and the prevention of overlapping in those markets where the productive capacity is already sufficient for the demand. Co-operation would, therefore, seem to be a sound policy, and the firms of Stewarts & Lloyds, Ltd., and the United Steel Co., Ltd., of 17, Westbourne Road, Sheffield, have agreed to a policy of extension in steel production in which they will, to their mutual advantage, avoid uneconomical duplication of plant; co-operate in sales policy; and co-operate in research, technical development, and production methods.

## MRS. VICTOR BRUCE'S WIRELESS

**AS** already announced in *FLIGHT*, adequate wireless equipment is to be a feature of the attempt which Mrs. Victor Bruce is planning to make on the duration record. When she starts from Hanworth, towards the end of this month, her "Windhover" (three Gipsy II's) will be fitted with the latest Marconi light aircraft set type A.D. 22b, which incorporates a telephone transmitter of 75 watts power and a three-valve receiver. This will operate on the specially allotted wave length of 764 m. as well as on the international aircraft wave length of 900 m. Mrs. Bruce is receiving

special instruction in servicing this apparatus, and will probably qualify for the Air Telephone Operators' licence before the flight. A dual-voltage wind-driven generator will supply the power, not only for the wireless equipment but also for navigation lights, while another generator, with an output of 450 watts at 14 volts, is being carried to supply power for domestic purposes and to illuminate an advertisement sign. Both generators will be on retractable arms so that they may be withdrawn for attention during the flight or when they are not needed. The mobile ground station, which will direct Mrs. Bruce's flight throughout, is a 10-cwt. Morris van, employing the more powerful Marconi transmitting and receiving type A.D. 18a. This is of 350 watts power and incorporates an independent drive circuit, its wave length being 300-1,600 m., while the receiver covers a band of 300-1,800 m. In addition, a long-wave Marconi receiver will be carried in order that weather reports sent out on 4,100 m. from the Air Ministry may be received.

## A COMPER CATALOGUE

**A** RECENT publication by the Comper Aircraft Co. is their new catalogue. This is admirably produced on the latest and most modern loose-leaf principle, and provides the potential purchaser with all the information he requires in a readily assimilated form. Performance details are clearly laid out in a table in large type, both in English and in metric figures, while the chief detail features of the aircraft are dealt with by means of small inset photographs alongside the appropriate text. A comprehensive section deals with the constructional side of this interesting little machine, and this is followed by pages which give a great deal of information about the remarkable Pobjoy engine which is now used as standard. Copies of this catalogue will be sent to bona-fide inquirers who write mentioning *FLIGHT* to the Comper Aircraft Co., Ltd., Hooton, Cheshire, or to Brian Lewis & Co., Ltd., of 30, Conduit Street, London, W.1, who are the sole concessionaires for Great Britain and Northern Ireland.

## AN ENGINE LOG

**THE** Air Log Co., Ltd., of 193, Elgin Terrace, London, W.9 (Maida Vale 8206), have just introduced an adaptation of their Air Log, which records the time the engine is running. All the aircraft of the Phillips and Powis School of Flying at Reading have been fitted with this instrument, and they find it invaluable for increasing the efficiency of their engine maintenance. The instrument works on the same principle as the Air Log, but is set into action by the suction of a venturi head placed in the slipstream of the airscrew. It records all engine movements from the tick-over to full throttle, and its use has brought out the little realised fact that on most aircraft the engine time is about twice that of the flying time.



# THE ROYAL AIR FORCE

London Gazette, May 31, 1932.

## General Duties Branch

The follg. are granted temporary comms. as Flying Officers on attachment for duty with R.A.F. (May 17):—*Sub-Lieutenants, R.N.*—R. J. Cooper, R. D. L. Dickson, V. W. Dobson, H. J. F. Lane, D. D. O'Brien, B. J. C. Wise. *Lieutenant, R.M.*—A. C. Newson.

The follg. Pilot Officers on probation are confirmed in rank:—F. S. Gardner, R. H. Preller (May 12); W. J. Hickey (May 13); D. G. W. Somerville (May 15). The follg. Pilot Officers are promoted to rank of Flying Officer:—J. G. G. Moore (March 26); J. A. B. Begg (May 10); J. C. Larking (May 17).

Sqdn. Ld. E. B. C. Betts, D.S.C., D.F.C., is placed on half-pay list, Scale A (May 21); Sqdn. Ld. R. F. S. Leslie, D.S.C., D.F.C., A.F.C., is placed on half-pay list, Scale A (May 25); Pilot Officer R. A. McDonald resigns his short service commn. (May 20); Flt.-Lt. J. C. Belford is placed on retired list at his own request (May 13).

## Stores Branch

Flying Officer A. H. E. Frost resigns his permanent commn. (May 14).

## Memorandum

The permission granted to Sec. Lt. W. L. Alderson to retain his rank is withdrawn on his conviction by the Civil Power (May 4).

## PRINCESS MARY'S ROYAL AIR FORCE NURSING SERVICE

Staff Nurse Miss M. R. McC. Dalling resigns her appointment (June 1).

## ROYAL AIR FORCE INTELLIGENCE

**Appointments.**—The following appointments in the Royal Air Force are notified:—

### General Duties Branch

*Squadron-Leader* A. L. Fiddament, D.F.C., to R.A.F. Staff College, Andover, 9.5.32, for duty as Instructor.

*Flight Lieutenants:* H. R. McL. Reid, D.F.C., to No. 22 (B) Sqdn., Martlesham Heath, 12.5.32. R. C. Wilson, to No. 4 Flying Training School, Abu Sueir, 4.5.32. R. Y. Eccles, to H.Q., Cranwell, 21.5.32. W. A. Duncan, to Air Ministry (D.O.S.D.), 12.4.32. L. M. Elworthy, to No. 17 (F) Sqdn., Upavon, 29.5.32. A. Leach, M.C., to Central Flying School, Wittering, 11.5.32. E. F. Thorpe, to Home Aircraft Depot, Henlow, 25.5.32.

*Flying Officers:* A. G. C. Somerhough, to No. 2 (A.C.) Sqdn., Manston, 18.5.32. H. G. Richards, to No. 31 (A.C.) Sqdn., Quetta, India, 20.4.32. F. A. McNeill, to No. 502 (Ulster) (B) Sqdn., Aldergrove, 21.5.32. C. Sarsfield-Sampson, to No. 10 (B) Sqdn., Boscombe Down, 21.5.32. H. B. Robertson, to Station Flight, Andover, 21.5.32. D. M. T. Macdonald, to No. 603 (City of Edinburgh) (B) Sqdn., Turnhouse, 23.4.32. G. G. Stead, to No. 18 (B) Sqdn., Upper Heyford, 17.5.32.

*Pilot Officer* R. H. Maw, to No. 57 (B) Sqdn., Netheravon, 3.5.32.



## AIR MINISTRY NOTICES

### NOTICES TO GROUND ENGINEERS

**No. 17 of the year 1932. Gyroplanes: Validity of Ground Engineers' Licences in Categories A and B. (178749/32.)**

Ground Engineers' Licences in Categories A and B endorsed in general terms (e.g., "Landplanes," "Single Engine Landplanes," "All Heavier-than-air Aircraft," etc.), do not empower ground engineers to issue daily certificates of safety for flight in respect of Gyroplanes, or to certify overhauls, repairs, etc., in respect of such aircraft.

Ground Engineers intending to operate with Gyroplanes are required to obtain a special licence endorsement to cover this class of aircraft, for which purpose application should be made to the Secretary, Air Ministry (C.A. 2), Adastral House, Kingsway, W.C.2.

April 29, 1932

**No. 18 of the year 1932. Examination of Applicants for Ground Engineers' Licences: Category "D"—Inspection of Aero Engines after overhaul. (175411/32.)**

Holders of Ground Engineers' Licences in Category "D" wherein the validity is restricted to the "fitting of spares already inspected and approved by a competent authority," are hereby notified that after August 1, 1932, they will be required to present themselves for re-examination when their Licences become due for renewal. It has been decided to reduce to some extent the standard of knowledge of materials that has been previously required, and it is hoped that by such re-examination the restrictive clause can be removed in the majority of cases; on the other hand, it is considered that every holder of a Licence in Category "D" should have a knowledge of materials up to the standard that will be required in the future.

May 5, 1932



### Essex Regiment—Information Wanted

WILL officers of the Essex Regiment (all Battalions) who served in the R.F.C. or R.A.F. during the Great War please communicate with Flt. Lt. A. L. Chick, Kensworth Cottage, Glebe Road, Staines, giving details of the following:—Date of joining regiment; date of seconding to flying service; squadrons served in; decorations, and whether wounded. This information is required to assist him in compiling a Record of the careers of Essex Regiment Officers who also served in the Flying Services.

### Air Service Training at Hamble

"BLIND FLYING" is still a popular course at the A.S.T. College at Hamble, pilots from the Greek Naval Air Force, Norwegian Air Force and the Siamese Air Force all having completed this course recently. The civilian side of the school is prospering, and over 200 hours were

## ROYAL AIR FORCE RESERVE RESERVE OF AIR FORCE OFFICERS

### General Duties Branch

The following are transferred from Class C to Class A:—*Flight Lieutenants.*—H. J. Gearing (April 17); C. V. Lock (April 23); D. G. Allison (May 30). *Flying Officer.*—C. K. Turner Hughes (May 19).

The following Flying Officers are transferred from Class A to Class C:—H. S. Basford (March 11); S. E. Taylor (April 20); J. S. Dick (May 21). The following Flying Officers relinquish their comms. on completion of service:—G. G. Matthews (Feb. 26); G. A. R. Malcolm (April 26); A. G. Moon (June 1). Ft.-Lt. F. E. C. Benstead resigns his commn. (May 12). *Gazette* Dec. 22, 1931, concerning F/O. E. L. Purdy, M.C. is cancelled. *Gazette* March 8 concerning Ft.-Lt. A. M. D. Howes is cancelled.

### Accountants Branch

F/O. G. R. Keep (Capt., Royal Sussex Regt., R.A.R.O.) relinquishes his commn. on completion of service (April 28).

## AUXILIARY AIR FORCE

### General Duties Branch

No. 604 (COUNTY OF MIDDLESEX) (BOMBER) SQUADRON.—P/O. M. F. Anderson is promoted to rank of Flying Officer (May 4).

### Stores Branch

*Flight Lieutenant* A. P. Woollett, to Station H.Q., Northolt, 21.5.32. *Flying Officers:* E. N. A. Crowe-Browne, to R.A.F. Reception Depot, West Drayton, 21.5.32. C. I. Fry, to No. 3 Stores Depot, Milton, 21.5.32. G. J. Gaynor, to No. 4 Stores Depot, Ruislip, 21.5.32. H. W. Penney, to School of Army Co-operation, Old Sarum, 21.5.32. R. S. Sawyer, to Aircraft Park, Lahore, India, 23.4.32.

### Accountants Branch

*Squadron Leader* A. W. P. Phillips, O.B.E., to R.A.F. Base, Calshot, 21.5.32, for accountant duties, vice F/Lt. D. J. Sherlock.

### Medical Branch

*Wing Commanders:* P. M. Keane, to No. 23 Group H.Q., Grantham, 27.5.32, for duty as Senior Med. Officer vice W/Cdr. J. Rothwell. J. Rothwell, to No. 21 Group H.Q., West Drayton, 31.5.32, for duty as Senior Med. Officer.

## No. 20 of the year 1932. Cirrus-Hermes Engines: Main Bearing Caps. (144366/31.)

Main bearing caps in Cirrus-Hermes engines manufactured prior to August, 1930, were made in aluminium alloy to Specification L.5, and it has been found by experience that these parts are liable to develop cracks which ultimately result in failure of the cap.

A symptom of this defect is a falling-off in the oil pressure which becomes progressively worse as the cracks develop. If, therefore, the oil pressure has dropped unduly, it should be verified that there are no external leaks in the oiling system, and the bottom half of the crankcase should then be removed for inspection.

Cracked bearing caps must be replaced by new ones, and it is preferable that the crankcase should be returned to the engine makers for this purpose. Alternatively, new caps produced in accordance with Modification H.E.M.1, as listed below, which have the bolt holes slightly elongated to allow for any differences in bolt centres, can, if necessary, be obtained from the makers and fitted, in which case care must be taken to ensure that the new cap is central in a transverse direction before finally tightening the slotted nuts. The modified caps are as follow:—

C. 190. A.	Bearing Cap, front, rear, and centre	3 off per engine.
C. 191. A.	" " " No. 2 and No. 4	2 off per engine.

Bearing caps fitted to engines of later manufacture are made from "Y" alloy and are of a more robust construction. This strengthened type of cap is used for all replacements by the engine builders.

May 24, 1932

flown during the past month. Lord Amherst, with Messrs. Burton, Seilern, and Wilson, have been receiving advanced dual instruction, while the two latter have also taken the night-flying course. Mr. Ngo Kok Tie recently joined the school for *ab initio* training on elementary and Service-type aircraft, and such is the excellence of the progress he has made that he is now flying solo on the Avro "Tutor." Mr. Rumsey has completed the test for his "B" pilot's licence, while Mr. Chadda is nearly ready to do so. Among others who are also training for their "B" licence are Messrs. Gardiner, Kennedy, Almond, and Bickman. It is pleasing to note that, despite the general pessimism over the international economy situation, the number of new pupils joining does not diminish, and several new British and foreign ones will be starting training courses in June.

## AIR POST STAMPS

By DOUGLAS ARMSTRONG

### Latest Transatlantic Stamp

THE Transatlantic flight of the German flying-boat, Do-X, has added yet another variety to the popular and elusive special stamps of Newfoundland associated with the crossing of the Herring Pond by air. For the purpose of a limited air mail made up by the Post Office at St. John's, on May 19 and 20, 3,000 copies of the contemporary \$1 air post stamp of the Dominion received a souvenir overprint in five lines of red-type reading:—

Trans-Atlantic  
West to East  
Per Dornier Do-X  
May, 1932.

One Dollar and Fifty Cents

together with a printer's rule cancelling the original value inscription. The stamp itself bears a map of the routes followed by historic Transatlantic flights which began or touched at Newfoundland.

The Do-X air mail was delivered in London on May 26, six days after leaving St. John's, but at the time of writing it is not known exactly how many letters were carried. On the basis of "numbers printed," however, the special stamp must be valued very much lower than any of the previous Transatlantic issues, with the exception of the \$1 variety prepared for the "Alcock," "Handley Page" and "Raynham" air mails in 1919, of which there were as many as 10,000 overprinted.

### Former Do-X Issue

The Do-X appears to be following in the footsteps of the *Graf Zeppelin* in the matter of particular stamp issues for her world flights. It may be recalled that as recently as August, 1931, air post stamps of the colony of Surinam (Dutch Guiana) were expressly earmarked for use on a mail despatched by the Dornier flying-boat to Trinidad and the U.S.A. by the addition of the words "Vlucht Do-X 1931" in the form of an overprint. Attempts were made to discredit the issue, of which only some 4,200 series were actually sold and the balance destroyed. Since the production of official decrees authorising the emission and vouching for its status, philatelic opinion has veered round, and there is every indication of an early rise in the market value of this, the first of the Do-X's.

### More "Zepp" Stamps

Air post collectors are inclined to look askance at the rapidly growing number of Zeppelin stamps. Brazil is responsible for the newest varieties which were issued for the first time on May 2 in connection with the return flight of the dirigible from Pernambuco to Friedrichshafen. They consist of the ordinary current postage stamps of Rs. 5\$000 blue-violet bearing the head of Ruy Barbosa, surcharged "Zeppelin-Rs. 3\$5000 and the Rs. 10\$000 claret in the "Instruccao" type, similarly surcharged Rs. 7\$000, and it is understood that they are to be employed for letters and post-cards respectively on future Zeppelin mails originating in that country.

### An Air Stamp Anachronism!

To associate the name of Gen. Garibaldi, the Liberator of Italy, with such a modern institution as the flying post savours somewhat of anachronism, yet a striking set of commemorative postage stamps just released by the Italian Post Office in honour of the fiftieth anniversary of his death includes five denominations reserved exclusively for air mail use. Their respective vignettes depict Garibaldi's home at Caprera (50 c. rose and 1 lire red-brown), the farmhouse where Anita Garibaldi died (80 c. grey-green), a contemporary portrait of Anita by a Montevidean artist (80 c. grey-green) and one of the Liberator himself upon the air stamp of 5 by 1 lire deep green. Supplementary denominations of 25 centesimi grey-green and 75 c. ochre have likewise been incorporated in the regular Italian air stamp series, the former in the type representing a trophy of wings and the latter showing the Spirit of Flight.

### Bulgarian Atrocity

It transpires that a new set of three air post stamps issued in Bulgaria between May 9 and 20 was in the nature of a speculative issue arising out of a special air mail flight arranged to take place on May 17 in connection with the air stamp exhibition then being held at Strassburg (Alsace). The design common to all values shows an aeroplane passing over the famous monastery of Rilo, in the Balkans, in emerald for the 18 levas, carmine for the

24 L. and ultramarine for the 28 L. The edition is said to have been restricted to 50,000 sets.

### Air Stamps at Auction

At a recent London stamp auction a specimen of the first British aerial post-card, carried by Grahame White between Blackpool and Southport on August 10, 1910, on behalf of the *Empire News* special air post, realised £17. £56 was paid for a very fine "flown" cover franked with the "Miss Columbia" air mail stamp of Newfoundland and showing the Harbour Grace postmark. Good prices were also obtained for two notable air stamp "errors," the inverted surcharge of the 3 Mk. on 60 c. air stamp of Memel, 1921, fetching £16 and the "Broken Propellor" variety of the Philippines 2 c., Madrid-Manila series, £18. A complete mint sheet of 25 of the Newfoundland \$1 Transatlantic air mail stamp of 1919, containing all varieties, sold for £42.

## PUBLICATIONS RECEIVED

*Powdered and Granulated Aluminium.* The British Aluminium Co. Ltd. Adelaide House, London, E.C.4.  
*The Motor Cyclist's Reference Year Book, 1932-1933.* Edited by F. J. Camm. London: George Newnes, Ltd. Price 1s.  
*The Motor Repair Manual.* Temple Press, Ltd., Rosebery Avenue, London, E.C.1. Price 2s. 6d. net.  
*Kestrel Aero-Engines.* Air Publication 1416. Vol. I. London: H.M. Stationery Office, W.C.2. Price 5s. net.  
*Aeronautical Research Committee Reports and Memoranda: No. 1449. Anchors for Use on Flying Boats.* By L. P. Coombes, B.Sc. May, 1931. H.M. Stationery Office, London, W.C.2. Price 1s. 3d. net.  
*Freedom of Passage for International Air Services.* By L. H. Slotemaker. A. W. Sijthoff's Uitgeversmaatschappij, Leiden, Holland. Price Fl. 2 50.  
*The Hoyt Book on the Lined Bearing.* The Hoyt Metal Co. of Gt. Britain, Ltd., Deodar Road, Putney, London, S.W.15.

### Catalogue

Comper Swift. The Comper Aircraft Co., Ltd., Hooton, Cheshire.

## NEW COMPANIES REGISTERED

**AIRWORK ENGINE SERVICE, LTD.,** Heston Air Port, Hounslow.—Capital £1,000 in £1 shares. Manufacturers and repairers of and dealers in motor and aero engines and all other mechanical parts of aeroplanes, lorries, etc. Permanent directors: H. Andrews, 94, Woodstock Road, Moseley, Birmingham; F. A. I. Muntz, 6, Leopold Road, Ealing, W.5 (director of Airwork, Ltd.).

**MAIDSTONE AIRPORT, LTD.,** 126, Long Acre, W.C.2.—Capital £1,000 in 1s. shares. Objects: To establish, maintain, work and carry on lines of communication by means of aeroplanes, seaplanes, and other aerial conveyances; to act as instructors of aviation, aerial navigation, and aerial and ground signalling; to carry on the business of wireless and radio engineers, manufacturers of and dealers in aircraft, etc. First directors: Count Johnston-Noad, Royal Aero Club, Piccadilly, W., lawyer (director of Land, Air & Water Services, Ltd.); J. Amery, 11A, Eaton Square, S.W., film director.

**SILVER BULLET SPEEDCRAFT, LTD.,** 14, Queen Victoria Street, E.C.4.—Capital £1,200 in £1 shares. Carriers of passengers, merchandise and goods, carriers of passengers for pleasure trips and cruises in aircraft or water speedcraft, etc. W. Gilbert signs documents as director. Solicitors: Gilbert, Clarke & Gilbert, 14, Queen Victoria Street, E.C.

## AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motors. (The numbers in brackets are those under which the Specification will be printed and abridged, etc.).

### APPLIED FOR IN 1931

Published June 9, 1932

- 3,941. ECLIPSE AVIATION CORPORATION. Engine-starting mechanism. (372,773.)  
4,433. H. JUNKERS. Apparatus for determining the heights of aircraft. (372,819.)  
4,434. H. JUNKERS. Electrical method of and apparatus for measuring the approach of an aircraft towards the ground. (372,820.)  
7,859. ECLIPSE AVIATION CORPORATION. Engine-starting mechanism. (372,889.)  
11,088. CARBURATORI MEMINI SOC. ANON. ITALIANA. Carburettor for use with aircraft engines. (372,913.)

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